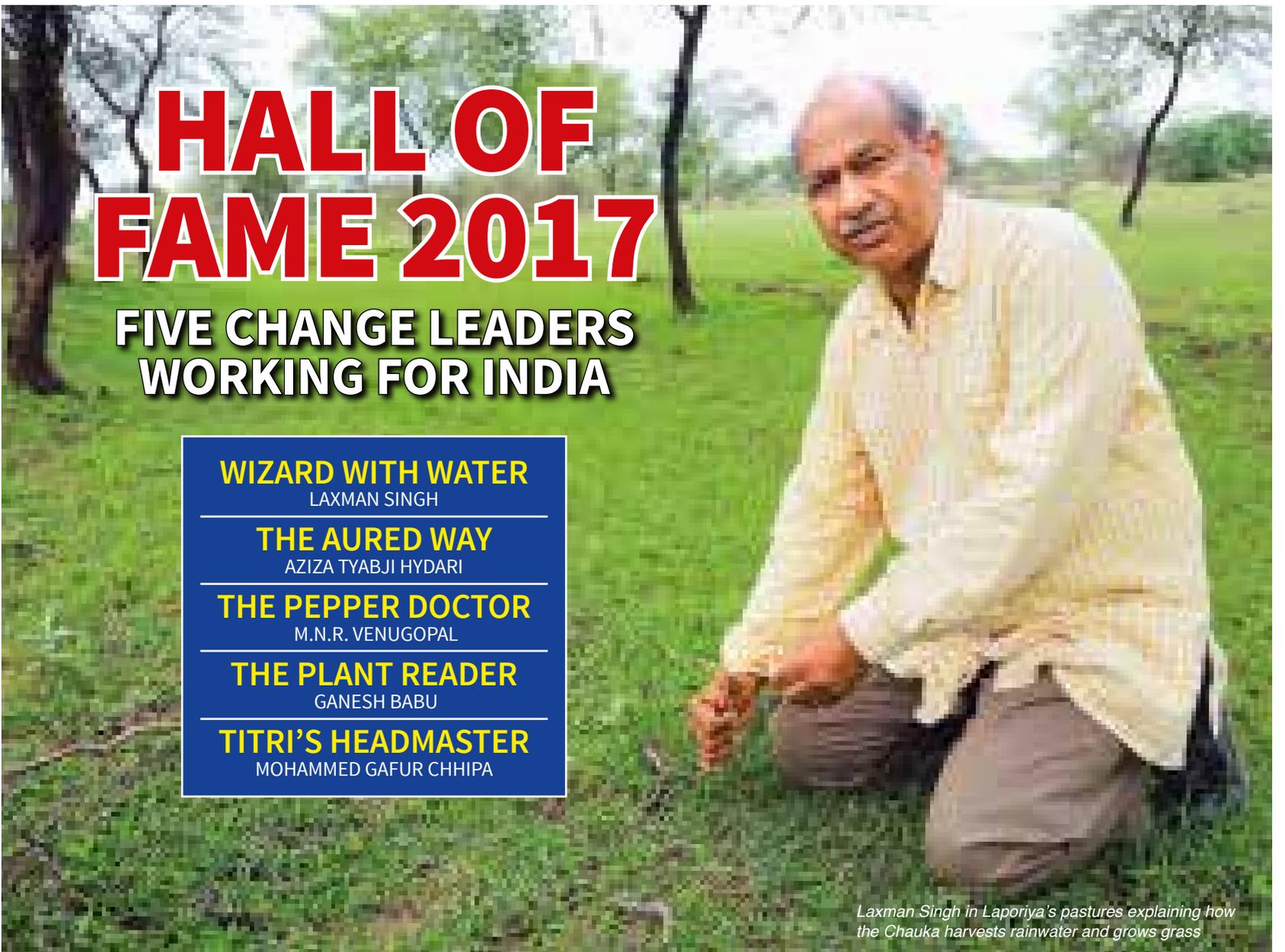


# Civil Society



## HALL OF FAME 2017

FIVE CHANGE LEADERS WORKING FOR INDIA

- WIZARD WITH WATER**  
LAXMAN SINGH

---

- THE AURED WAY**  
AZIZA TYABJI HYDARI

---

- THE PEPPER DOCTOR**  
M.N.R. VENUGOPAL

---

- THE PLANT READER**  
GANESH BABU

---

- TITRI'S HEADMASTER**  
MOHAMMED GAFUR CHHIPA

*Laxman Singh in Laporiya's pastures explaining how the Chauka harvests rainwater and grows grass*

### 'IT'S A LONG JOURNEY TO GETTING ENTITLEMENTS'



Osama Manzar explains how SoochnaPreneurs with an app and a tablet are improving delivery of government schemes to villagers in rural India

Pages 36-37

# 14<sup>th</sup> ANNIVERSARY SPECIAL ISSUE

### NREGA WOMEN DIG WELLS

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### J&K'S PEACEFUL ACTIVIST

Page 40 .....

### A 'LEARN EAST' POLICY

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### FROZEN JACK IN DELHI

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### PRODUCTS

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**MICROFINANCE INSTITUTIONS NETWORK**  
POWERING RESPONSIBLE FINANCE

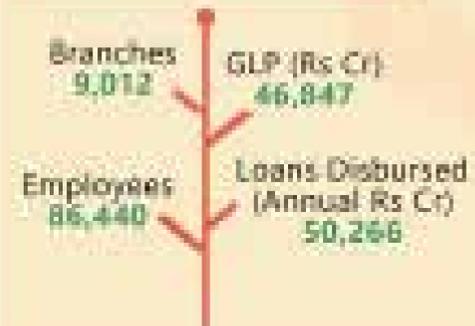
**Microfinance Institutions Network** is the industry body for RBI regulated NBFC-MFIs. Established in October 2009, MFIN was appointed as the Self-Regulatory Organisation (SRO) for the sector by the Reserve Bank of India (RBI). MFIN through its members, helps provide financial services to low income households in a responsible & transparent manner, thereby helping them build sustainable livelihoods. MFIN also works closely with regulators and other key stakeholders and plays an active part in the larger financial inclusions dialogue through the medium of microfinance.

MFIN's primary objective is to work towards the robust development of the microfinance sector by promoting: responsible lending, client protection, good governance and a supportive regulatory environment.

**Membership**

The membership of MFIN is open to RBI regulated, NBFC-MFIs. All applications for the new membership go through a well laid out process including an on-site due diligence and Board review. As members, NBFC-MFIs become part of the peer community that shapes the strategic directions of MFIN and the industry. Currently MFIN has 51 members, diverse in size and geographic spread.

**MFIN Members' consolidated operation overview 2017**



NBFC-MFIs primarily serve low income households, both rural & urban with **99% Women clients**

**Services offered**

Microcredit	Pension Insurance
Financial Education	Livelihood Service

**Associateship**

MFIN rolled out its Associateship programme in January 2014. This was done with the understanding that stakeholders other than NBFC-MFIs who have a lasting bearing on the financial inclusion dialogue and are of immense value to the sector need to interact and work with each other to fuel the larger goal of Financial Inclusion.



**Water for Life.**

Project of rural water supply started in Malprachhok, Palghar district of Maharashtra which faced the issue of water supply shortage—resulting in seasonal cultivation and low-income levels, which forced the villagers to migrate in search of employment.

To help address this problem, rural water supply project was initiated through a community based approach.

The project set up a water pump along with 1,700 meters of pipeline and also developed drip irrigation grid covering through solar-powered 10 irrigation systems. This forced the unutilized water from the valley up into the hills, and provided water for daily consumption and soil watering.

The implementation has been a success. Farmers gained access to about 10,000 liters of water and were able to extend their cultivation cycle from a single 45-day crop to a double 90-day crop. The overall growth has been seven fold over the period. Project has helped in generating livelihoods & together, we can make a difference over the millions of lives.

The project has had a positive impact on over 400 low income & villages, in addition to extending cultivation cycle, increasing the income levels and reducing migration, access to water has also improved hygiene levels and reduced disease.

Drinking water is a basic necessity for a community and a good life.



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February 3, 2017 was a memorable day. Rita and Umesh Anand were presented the Bharat Asmita Jan Jagran Shrestha 2017 Award in Pune. This award is meant for outstanding journalism leading to great social awakening that has become the pride of India. In my opening remarks at the beginning of the awards function, I described *Civil Society* as a conscience keeper of the nation. And this it has done by being a truly independent voice for the past 14 years.

My mind goes back to September 2003 when *Civil Society* was launched. With a glint in his eye and passion in his belly, Umesh had then described his dream to me. It was all about change.

Umesh himself was moving from big media to a small media business, which to him should not be burdened by big capital and yet be sustainable.

He wanted to bring a paradigm shift in the why, what and how of media. He wanted to deal with real people, real India and real issues. He wanted to sing a song for unsung heroes from remote hidden corners of India, that the normal media didn't care about or write about. Quite a heady dream, I thought then.

Is *Civil Society* in 2017 living up to the dream with which *Civil Society* in 2003 was started? As a regular and avid leader of *Civil Society*, I can confidently say that it has, and I dare say that it has even surpassed the initial expectations!

*Civil Society* has covered topics ranging from lynching to triple

*talaq* to muddled malnutrition to net neutrality to midday meals to resettlement of slum dwellers to disability rights. All real issues of real people of a real India!

But there also has been celebration of innovative solutions to problems assuming criticality for India, water being one such issue.

The wonderful contribution by the Pani Foundation, where farmers compete to provide great solutions to make their villages drought proof is one example. The recent tribute to the late Anupam Mishra, whose amazing work on water conservation stands so much apart, is the most moving piece that I have read in my lifetime.

*The Water Catchers* is an incredible book published by *Civil Society* covering the big impact of big ideas of small people in water conservation. Replicating these innovations by the people for the people nationally will change the Indian water availability and accessibility scene totally!

I had the privilege of being the chief guest at the Civil Society Hall of Fame 2016 recognition ceremony last year. The theme 'everyone is someone' touched my heart. I was impressed with the ability of Rita and Umesh to identify people doing transformative work in remote interior parts of India.

*Civil Society* is unique in its intent, in its content, in its values, in its messages and in its bold journalistic brand. And that is why we Indians are proud of the fact that *Civil Society* is an Indian brand.

**Dr R.A. Mashelkar is National Research Professor and Chairman of the National Innovation Foundation**

## Feedback

READERS TELL US WHAT THEY THINK



By common consent, we live in a post-truth world in which the medium is the message. Mark Twain once said, "Often the hen that only laid an egg cackles as if she laid an asteroid!" In many ways, our public discourse and media are a living proof of that. The decibel level attracts attention at the cost of substance, relevance and creative, productive outcomes.

In this backdrop, *Civil Society* is a breath of fresh air. We need calm, unhurried, respectful and meaningful public discourse. *Civil Society* provides that platform. We need focus on evidence and logic to arrive at workable, rational solutions to address our complex challenges. *Civil Society* helps in that process. We need to pay attention to the basics of a harmonious society, efficient

delivery and systems of accountability. *Civil Society* does that.

Most of the challenges facing our governance, economic development and social cohesion are rooted in our incapacity to build robust and effective institutions and our failure to replicate successful best practices on a mass scale. The few times we successfully replicated best practices — the Green Revolution, the Milk Revolution — we surprised ourselves and astounded the world. *Civil Society* provides us invaluable service by addressing institutional challenges and propagating best practices.

In an ideal world, society, state and market should have the wisdom and capacity to nurture its best to further public interest. In the real world, pursuing public causes uncompromisingly and relentlessly is a difficult and thankless task. *Civil Society* deserves our full support — moral, financial, intellectual and institutional.

**Jayaprakash Narayan is Founder and President of LokSatta**



Civil society is the backbone of a democratic country. For civil society to be able to influence public policies, it should be fully informed about facts. It is this vital need that *Civil Society* magazine is fulfilling. I wish the magazine continued success in helping to strengthen our secular

democracy and promote understanding and cooperation among all sections of society. I am particularly happy that *Civil Society* is stressing the role of women in our democratic agenda. I wish this journal continued success in helping our country to harness the power of civil society in creating a happy and prosperous India. The role of civil society is particularly important in providing our villages with minimum essential requirements such as education, nutrition and healthcare. I am again happy that *Civil Society* magazine is following Mahatma Gandhi's advice that '*gram swaraj* is the pathway to *poorna swaraj*.'

**Dr M.S. Swaminathan is Founder-Chairman of the M.S. Swaminathan Research Foundation**



Every month I look forward to receiving my print copy of *Civil Society*. Although I initially preferred the online version for its ease of access and eco-friendly format, I renewed my print subscription to share it with family and friends here in Texas.

Over the past two years I have learned about many issues from unfamiliar ones such as growing mangoes and jackfruit to topics dear to my heart, such as education and water conservation. On a recent trip to New Delhi, my family even added a visit to the Hazrat Nizamuddin shrine and Humayun's tomb after reading a CS article about urban renewal in that area. It was a wonderful and new experience for us.

Like many people of Indian origin in the United States, I am less curious about the day-to-day political developments in India, but I want to understand trends and how the daily news impacts India's people and society. *Civil Society's* focus on real people engaged in community building efforts provides such news through compelling stories backed by high-quality reporting and rich photography. I also appreciate the magazine's diversity of regions and topics, and its inclusion of recognised experts — academics, industry leaders — as well as ordinary people doing extraordinary things. I find this approach not only refreshing, but also uplifting, optimistic and inspiring. It is a reminder that each one of us has something worthwhile to contribute as a citizen of a civil society.

**Deepti Kharod is a teacher in Schertz, Texas**

## Feedback

READERS TELL US WHAT THEY THINK



When a large part of the Indian mainstream media has become too commercialised and tends to kowtow to the dictates of the establishment, *Civil Society* magazine comes as a fresh breeze every month.

It gives us an insight into the good work being done in the development sector and also the way in which it is benefiting the common man.

We know very well that reports published in *Civil Society* are not written while sitting in cozy cabins but by crisscrossing the whole country despite the magazine's meagre resources.

During my decade-long association with *Civil Society* as its regular reader, I have never found it deviating from its chosen path. This magazine has been consistently enlightening us about

some of the greatest Indian NGOs, intellectuals, writers, social activists and innovative practitioners.

I especially admire the coverage of the magazine on poverty, nutrition, health, school education, gender issues, human rights, farmers' problems, consumer rights and agitations against sexual harassment and communalism.

Many a time, we have found that, *Civil Society* has withstood pressures and provocations to steadfastly followed a neutral, independent and pro-people stance. At the same time, it has consistently maintained quality in its content, layout and printing, which can be compared with any of the best magazines in India.

In these difficult times, when our republican values and idea of India itself are passing through tremendous challenges, we need *Civil Society* as our anchor!

**Dr Harivansh Chaturvedi is Director, BIMTECH**



I heard about *Civil Society* when it started in 2003, and thought the idea of an 'indie' magazine telling stories about change leaders who largely go unsung was most interesting — and timely. But it took me 13 years to start reading it regularly. And now that I've started, I don't read, I devour. Because the interesting mix of articles in every issue demands that you read the magazine from cover to cover, at one go. Where else will you find a story on a bunch of people trying to

keep Old Goa as a heritage zone alongside a report on the falling number of women in the workforce? (Take that, all you who thought more and more women were leaving their homes and going out to work, neglecting their children, husbands and dogs). There's even an Ayurveda Advisory!

Online, too, it has one of the most user-friendly sites I have seen. I particularly love the 'Who do you want to be' section, which clubs stories of the most unlikely people together, like a farmer from Warangal, an educationist who gave hope—and a school—to kids living in a tiny desert town in Barmer, and an LIC agent from Shimoga.

If *Civil Society's* mission is indeed to "show that skilled journalists can build small, independent media enterprises that matter," it can sit happy. **Shampa Dhar Kamath is Managing Editor at the New Indian Express**



I like diving deeper as it's better than just skimming the scum on top. It helps me make wiser opinions. Without getting under the covers, we can change our views — and India too — each day in every sitting room conversation!

*Civil Society* offers me that privilege and then I feel that although I imagine

myself as a marginal, I have some sound views on the central gallery. I also wish we could take the best of our two big parties and civilise India with more out-of-the-box solutions.

The people *Civil Society* gets to talk to and write about are only in whispers, but their impact is often a shout. They need to be empowered. Parliament should read *Civil Society*.

And the ones who are shouting around with event managers in tow, don't appear in *Civil Society's* gallery of the greats. I love that burial too!

**Aman Nath is the founder of Neemrana Hotels**



In a world where the committed and sincere space for telling stories is shrinking and the footage that can be derived from a story defines the newsworthiness of that story, *Civil Society* stands out as a magazine that covers issues and people in all their diversity. The focus is not restricted to any one area. It is anything and everything that is actively contributing to change across the country and the people driving this change. The champions range from those known to the most unlikely. The stories told are of hard work, innovation and breaking of stereotypes. They soar on the positive outcomes they lead to.

Each edition is a pleasure to read. The size and quality of production take one back many years when magazines were kept, to be read later. The tales told linger at the back of the mind much after the first reading has been done. The sordid tale of lynchings across the country, different models of education in out of the way places by champions that never were professional educationists, water conservation, corruption, home schooling, financial sector dynamics, social impact investing.... The swathe is large really.

This diversity is what appeals and makes one look forward to each new issue of the magazine. The novelty of not knowing what to expect is probably the most compelling selling point. I wish *Civil Society* a long, long innings, going forward.

**Ratna Vishwanathan is CEO, MicroFinance Institutions Network**



Among the magazines I read, *Civil Society* is unique in the way it unearths and presents grassroots initiatives, compelling its readers to think in new ways which lead to richer debates, discourses and practices. In one meeting of scientists, bureaucrats and NGOs I attended, several acknowledged *Civil Society* as a magazine that brings Indian development discourse close to ground realities.

While the magazine has kept its flavour and integrity through the last 14 years, I feel it would do well, especially with democracy waning and weakening, and the media coming under threat, if *Civil Society* invested more into synergy, syndication and research to get stories, practices and thoughts that articulate creative ideas and reflect the struggles for livelihood, equality and justice in our society. The vibrancy that would result from such an investment would surely enrich democracy itself and deepen it.

My only problem with the magazine is that it is not easy to carry around. If you fold it, it gets crumpled and the pictures get ruined as a result. And since pictures tell a large part of the story, I wish there was some way of carrying the magazine around without ruining the pictures.

**K.S. Gopal is President, Centre for Environment Concerns**

## Feedback

READERS TELL US WHAT THEY THINK



With *Civil Society*, it's been love at first sight! The cover is always appealing and the production values outstanding. It makes you reach out for it and browse immediately. That's when you are spoilt for choice. Do you pause to listen to Voices, catch up on the News, focus on the Cover Story, read Insights from experts, understand new social business ventures, catch up on Living and more.

For nearly two decades one has been involved with civic issues and engaged with government, NGOs and folks across cities. In the past 14 years, *Civil Society* has been a constant, trusted companion providing us a window for the myriad initiatives in the public space that exist and the wonderful folks who are making a difference. Reading about them is an invigorating experience and renews one's commitment to plod on for good outcomes.

*Civil Society* is unique in its coverage about the government and social sector. It makes stories come alive with great reporting and lovely pictures to go with it. In today's polarised, TRP-ridden world, *Civil Society* is a breath of fresh air. More power to its elbow! **V. Ravichandar is Chairman, Feedback Consulting**



I have been a regular reader of *Civil Society* for several years. The magazine addresses real issues concerning society in a balanced, realistic way. It covers a wide range of subjects that commercial magazines and daily newspapers rarely cover as these are not saleable. Print and electronic media prefers to cover sensational news as this gets them more readership/viewership. Regular media thrives

on reporting bleak and negative news. *Civil Society* reports on government schemes, NGO initiatives, new-age businesses, rural development and other topics of general interest. What I like is that information is shared often through human interest stories woven around these topics rather than throwing cold statistics at the reader. This makes for much more interesting reading as it brings the issue alive. Lastly, the underlying message in each write-up is one of 'hope' and not 'despair'.

I wish the magazine success for many, many more years. May it continue to spread the message of 'hope' in a society turning more cynical by the day bombarded by news of doom and despair. **Pradeep Kashyap is Founder & CEO of MART**



I am an avid reader of *Civil Society*. It helps me evolve perspectives on a range of issues. It is consistent in providing its readers with gainful material irrespective of their conventional fields of interest. Few publications these days are as successful as *Civil Society* in prompting readers to think and act. *Civil Society* makes such motivational connections. It takes society in directions it needs to go.

It tracks societal trends and provides mindful insights into an array of developmental issues in fields ranging from politics, healthcare and education to creating headspace for discussions regarding minorities and other neglected sectors and communities.

*Civil Society* uses straightforward journalism to address issues often disregarded in the mainstream media. For all its seriousness of purpose, *Civil Society* is an easy read. It goes with a cup of coffee. **Abhijit Bose is Executive Vice President at DCB Bank**



I was introduced to *Civil Society* a year ago. Initially I was a bit sceptical. I thought it would be a preachy magazine. I was pleasantly surprised with its balanced tone.

*Civil Society* is doing a yeoman service by recording and sharing stories of ordinary people and institutions carrying out bold experiments in changing conditions related to soil, water, green energy, environment and marginalised people. These stories are simple, easy to read and serve as an inspiration to many. Such positive stories do not find enough space in the mainstream media. A magazine like *Civil Society* is an absolute necessity to share knowledge that can inspire and create impact, conserve our environment and encourage grassroots institutions to do their work. I wish Umesh and his team members success in their mission of spreading an alternative narrative.

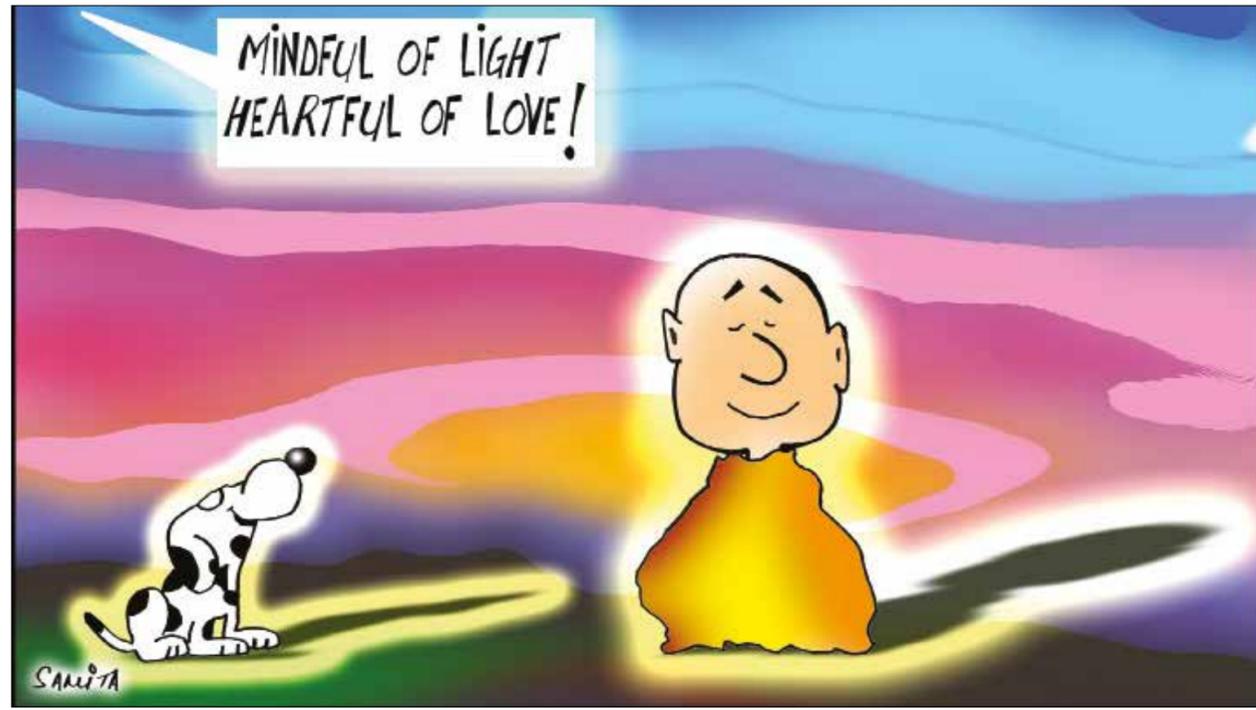
**Rajasekhar Reddy Seelam is MD and CEO of 24 Mantra**

## Feedback

READERS TELL US WHAT THEY THINK

## IN THE LIGHT

SAMITA RATHOR



# Feedback

READERS TELL US WHAT THEY THINK



Since the time I received the first issue of *Civil Society* I have been fascinated by it. One could never imagine in these times of sensational journalism a magazine so ethical and unbiased in its reporting. The articles are diverse with the language kept very simple. The quality of printing is superb and there is never a grammatical error — at least not one that I have found. The book review section is excellent and the Ayurveda section is well presented and extremely useful. Overall it is an inspired effort which is rare to find in publishing these days.

**Manu Verma is a chartered accountant in Gurgaon**



I have been a reader and propagator of *Civil Society* since its inception. It is a magazine that covers grassroots issues from different perspectives. I find that common people coming to my clinic like to read it and comment on its stories.

The purpose of all writing is to make people think about the issues that affect lives. *Civil Society's* coverage ranges from wildlife to politics and the impact of social enterprises. What I like about the stories and articles is

that they are always from the bottom up. Such an approach requires research and study. It is an important contribution that *Civil Society* is making.

I would also like to mention the *In the Light* cartoon, which makes me laugh and introspect at the same time.

I would like to suggest that the magazine add a page dedicated to profiling unknown innovators. It would give them exposure and also encourage others to pursue their own dreams.

I wish *Civil Society* every success.

**Dr K.C. Sharma is a consultant surgeon based in Jammu**

## HALL OF FAME

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COVER PHOTOGRAPH: P. ANIL KUMAR

## ANNUAL DOUBLE ISSUE

This September-October issue of *Civil Society* marks completion of 14 years of the magazine.

The next issue will be in November.

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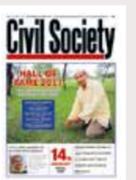
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**14<sup>th</sup>**  
Anniversary

## CIVIL SOCIETY HALL OF FAME 2017

IN ASSOCIATION WITH THE AZIM PREMJI FOUNDATION

— Laxman Singh —  
LAPORIYA, RAJASTHAN

— Aziza Tyabji Hydari —  
MUMBAI

— M.N.R. Venugopal —  
SIRSI, KARNATAKA

— Ganesh Babu —  
BENGALURU

— Mohammed Gafur Chhipa —  
TITRI, RAJASTHAN

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## HALL OF FAME

# SMALL IS BIG AND BEAUTIFUL TOO

RITA & UMESH ANAND

**T**HE reportage of our magazine has been focused on finding those seemingly small stories with big implications. We look out for innovators who could be changing the way we live and think. In a backyard or basement somewhere there are ideas being pursued which deserve national attention. We like to be the frontrunners in making that connection.

It is 14 years since we began publishing *Civil Society* and we continue to surprise ourselves with what we can go out and find for our readers each month. There are people solving problems and bringing change in healthcare, water, education, transportation, garbage, housing, organic food and more.

Not all of them are NGOs and activists. Some are farmers, others are doctors and lawyers. There are entrepreneurs with new-age business ideas. You will find management types who have pulled out of jobs early. There is also the odd corporation putting new meaning into corporate social responsibility.

Given the size and complexity of India, these are at best small efforts. Some are rural, some urban. But they each come with special meaning in their successes and failures. The challenge is in finding ways to decode what they are doing and share that learning with others who can use it.

From our experience, we have found that most serious social initiatives are focused and fervently local. So caught up with their ideas are the innovators that scalability and money are often the last things on their mind.

The Civil Society Hall of Fame was started eight years ago in association with the Azim Premji Foundation to build on what we were trying to do as journalists. Telling the stories was okay, but how about celebrating the innovators so that their remarkable lives and contribution to the country's development could become aspirational beyond the pages of a magazine.

Post-reforms India is a freefalling place. There is just too much going on to get a fix on anything. Technologies like the Internet and the mobile phone add to the distributed feeling of being in a kaleidoscope of floating pieces. In such circumstances, the Civil Society Hall of Fame tries to offer a standard we could aspire to.

Despite the social contribution that entrants to the Civil Society Hall of Fame make, their work would normally go unnoticed or at best be remotely understood. By celebrating them in our magazine and then at an event in a big Indian city, we try in our own way to set that anomaly right. We bring them to the India that doesn't know they exist. Perhaps their ideas will influence governments and find their way into policies. Maybe universities will bring them into their fold. At the very least, we would be happy if entry to the Civil Society Hall of Fame encourages them to carry on with their work.

As happens every year, the Civil Society Hall of Fame process has taken us from one end of the country to another as we visit the people on the list of names that the jury chooses. From Rajasthan, we have Laxman Singh for his outstanding work on drought-proofing in the rain-starved village of Laporiya.

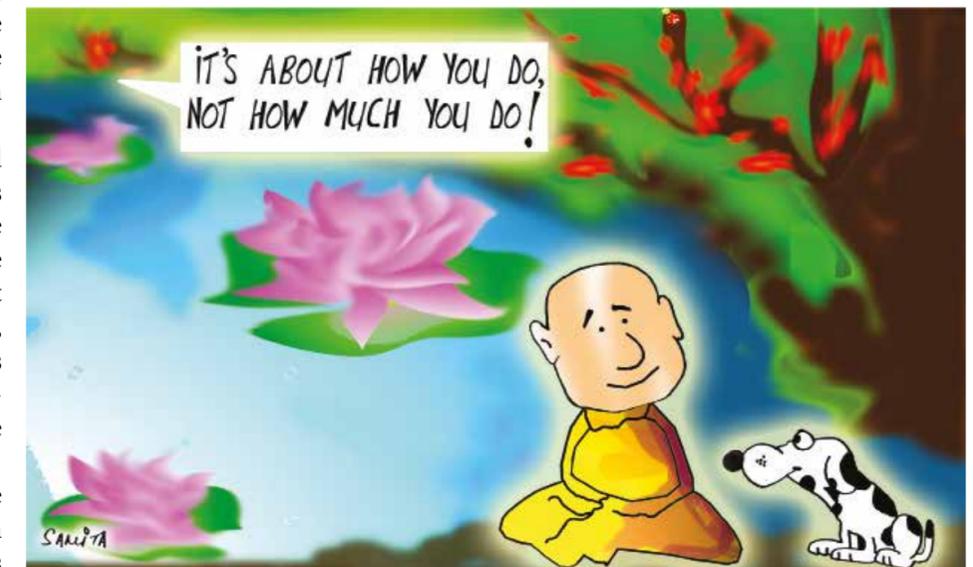
Laporiya has gone from extreme shortages to always having enough water. It is Laxman Singh who has brought about this change through harvesting whatever little rain the village receives. He has created the Chauka, which is a way of slowing down the flow of rainwater on the village's pastures. The result is water sinks into the ground instead of flowing away. There is also the right kind of grass for the village's animals. Increasing tree cover and having three water tanks has also helped.

Mohammed Gafur Chhipa is the headmaster of the government's upper primary school at Titri village in Rajsamand district of Rajasthan. With his dedication, Chhipa has transformed the infrastructure of the school and improved teaching. It is now a model school. He serves hot midday meals without any fuss and bother and has fitted an RO system so that the children get clean drinking water.

Dr M.N.R. Venugopal is the Pepper Doctor for farmers in Shimoga, Uttara Kannada, Chikmagalore, Hassan, Kodagu and Sirsi districts of Karnataka. A retired

agricultural scientist, he has shown farmers how to boost pepper yields and thereby increase their income. He goes from farm to farm giving advice and charges nothing from small farmers. Dr Venugopal is an example of how scientists should collaborate with people on the land so that farm incomes can improve.

Ganesh Babu's contribution is in identifying and collecting rare plants, many of them medicinal, from all over the



country. He has scoured forests far and wide and built a repository at the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bengaluru. He has also popularised the idea of raising urban herbal gardens and today Bengaluru has the most herbal gardens in the country.

Aziza Tyabji Hydari has been India's champion of auditory verbal therapy. In the eighties, she broke with convention to use the listen-and-speak method of teaching very young deaf children. The method was at that time new in the developed world. Thanks to her and others who work with her at her organisation, AURED, profoundly deaf children have a chance to speak and live normally.

As always, we owe a debt of gratitude to our many friends who sent in names for the Hall of Fame. And we especially thank the jury — Aruna Roy, Darshan Shankar, Vir Chopra, Dr D.P.S. Toor, Gautam Vohra and Harivansh — for their sincere effort in making a fair selection. ■

PICTURES BY P. ANIL KUMAR



Laxman Singh sitting next to a water body in Laporiya explaining how the intricate Chauka system works

## LAXMAN SINGH

# Wizard with water

**T**HE village of Laporiya in Rajasthan gets very little rainfall. The average for 18 years is less than 500 mm a year. In recent years it has been 300 mm. There has been the odd big downpour, but mostly drought-like conditions prevail.

It is scary and stressful to live in a desert region with very little rain and no other sources of water. Laporiya, though in Jaipur district and a few hours from the state capital, has seen some tough times when nothing would grow in its fields and young people left in search of a better life. But that was long ago. Now, even though it still doesn't rain much, the lack of water is the last thing that residents of this village worry about.

A passionate campaign launched by them 25 years ago to harvest the little rain they get and plant trees has sent groundwater levels up. It has ensured the wells always have water and their lives are better for it. It takes long for a village to go from no-water to water but Laporiya is proof that it can be done.

The inspiration for the campaign is Laxman Singh, then a young scion of the main landowning family in the village and now an elder at 61.

With water available, the village is full of trees and birds. The pastures have grass and the fields have crops. Healthy cows, goats and

sheep are in abundance and milk sales has boosted local incomes.

The transformation is difficult to imagine. Laporiya these days bears no resemblance to the dying village it once was. It is as though a wizard has been at work.

Laxman Singh, who had only studied up to Class 10, intuitively felt that collecting rainwater and putting it back into the earth was the key to stemming the decay.

He began by rallying villagers together to repair the single *talaab* or tank in the village. Soon they built two more big tanks.

But his outstanding and unique contribution over the years has been the invention of the Chauka system which lets rainwater collect and sink into the pastures.

A village that had gone to pieces is now an emblem of environmental balance and harmony. It is a model for 57 nearby villages, which have also adopted the Chauka system.

More importantly, they have pledged themselves to conservation by agreeing not to cut trees or hunt animals and birds.

Once a year, they take out a procession over several days to keep the spirit of the campaign going. They have also, very significantly, changed the way they live every day. It can be seen in multiple bio-reserves created to preserve gene pools of local plants and trees.



The right moisture brings back grass to pastures

Different names have been given to their *talaabs* depending on the purpose. There are enclosures and feeding platforms for birds. A memorial has been built for a rabbit killed by hunters as a reminder that wildlife shouldn't be destroyed. A clump of trees has been designated *Chuha Ghar*, or House for Rats, where rodents must be released, not killed.

Laporiya and its neighbouring villages are an example of how people can come together for their ecological well-being. From being a young man worried about his village's future, Laxman Singh has graduated to being a firm but benevolent elder.

Coming from the Thakur family in the village gave him a social advantage. Villagers were wired to listen to him. He is also by temperament persistent and persuasive and has an endearing sense of justice.

But for all these attributes, nothing would have changed were it not for the Chauka which revived the pastures and made harvesting of rainwater efficient.

### INVENTING THE CHAUKA

So, what exactly is a Chauka and how did the idea come to Laxman Singh?

"We needed a system which could provide the grass on which our animals could graze and recharge groundwater," recalls Laxman Singh. "You can recharge groundwater by having tanks. But how many tanks will you build on the 400 bighas of pastures that we have? The land would be destroyed. Also, we don't get the kind of rainfall needed to fill a large number of tanks."

"On the other hand, when we went into the pastures while it was raining we found that the water on the ground would quickly disappear when it stopped raining," Laxman Singh explains.

"Nature's way is to make the land slope. It is the law of nature that water will travel — to aquifers, streams, small rivers, big rivers and finally the sea. So, I felt we should not go against Nature.



The Chuha Ghar where rats are released and not killed



A memorial for a rabbit that was killed by hunters



Cows, buffaloes and sheep thrive on Laporiya's verdant pastures

**'It doesn't require much intelligence to make a water tank or a road. But if you set out to collect rainwater it is complex.'**

Instead, we should learn from it."

The Chauka was, therefore, designed to suit the slopes of the pastures. It would slow the flowing away of rainwater and give it time to percolate into the ground. It would also trap the water at a height at which it wouldn't interfere with the growth of grass. It was important that the pasture remain a pasture and not become a water body because then grass would stop growing in it.

A Chauka consists of ridges of mud and has four sides in the shape of a rectangle with one side open. At the maximum, a Chauka will hold nine inches of water. If more than nine inches of water collects, grass will not grow. But it is also important to go from nine inches down to zero because the water must keep moving even as it collects.

Also, different kinds of grass grow at lower heights of the Chauka. Animals need the variety. Goats go for the thorny grass. Cows and buffaloes prefer the leafy varieties.

Each Chauka is designed to suit the slope of the pasture in which it is located. All the Chaukas combine to form a larger design so that the flow of water can be directed.

The Chaukas of the 58 villages together make up a much larger design. Because of this, on the rare occasion there is heavy rainfall, these villages don't flood since the water circulates. In 2010, when there was such a downpour, there were floods

all over Rajasthan, but not here.

"It doesn't require much intelligence to make a water tank or a road. But if you set out to collect rainwater, it is a complex task. The amount of water you collect will determine what grows there. So, through trial error, we arrived at nine inches of water. It was based on studying Nature," says Laxman Singh.

"When walking around in the pastures we found natural hollows which were nine inches deep. Grass was growing in them. It is so even today and if you walk around during the rains or at any other time you will see this. If there is a hollow of three feet, water at that depth will destroy the soil. Grass will not grow, as happens in a tank, where water is kept standing for a long time."

"We wanted a system that would not just trap water but also promote microbial activity that would make the topsoil rich. Every year fresh grass should grow. Every year the ecosystem should go through its cycles. Every year our animals should get fresh grass to eat. Cows and goats eat different kinds of grass. Birds and butterflies draw on different kinds of flowers. We wanted all this diversity to continue," says Laxman Singh.

The Chauka system wasn't built in a day because several attempts had to be made to replicate the multiple nuances in Nature. It was a complex task and it meant failing more than once because Nature's way is not easy to understand, even for someone as sensitive as Laxman Singh.

To validate their ideas, Laxman Singh and other villagers went to university departments where they were ridiculed.

"They told us the solution was to build contour bunds. When we said that contour bunds weren't the solution in Laporiya, they laughed at us and said contour bunds were being used the world over," says Laxman Singh.

The villagers looked closely at the contour bunds the government was building in the area. These were long and unwieldy. Instead of slowing down the rainwater, they speeded up its flow. The



The Phool Sagar tank has water even in a lean year

result was the bunds would breach and the water would rush into the stream below.

Seeing the bunds fail made them even more convinced that they needed a solution suited to local conditions and based on their own observations and knowledge.

#### ANUPAM MISHRA'S INFLUENCE

A major influence on Laxman Singh's thinking was Anupam Mishra of the Gandhi Peace Foundation (GPF).

Mishra, who passed away in December last year, was India's foremost authority on traditional water systems like step-wells, tanks and ponds.

He was a painstaking grassroots researcher with invaluable insights into the traditions associated with community use of water. He was also intuitive in his understanding of the working of Nature.

"Anupamji taught us that everything we do should be in harmony with Nature and by learning from it," says Laxman Singh. "He also emphasised the importance of working in our immediate environs because only we could understand our local problems and arrive at lasting solutions."

"His style was an informal one whereby he would make suggestions and drop ideas and it was up to us to pick them up."

Mishra would move around the pastures and make suggestions on how the Chaukas could be made more efficient.

He made a significant contribution to the building of three tanks in Laporiya. At first, the tanks were being made any which way. It was only after Anupamji entered their lives that Laxman Singh and fellow villagers realised the subtleties of tank design.

"We had a broad idea that we needed tanks and we had begun making them. But we knew nothing about the rich traditions and the finer points of design and engineering. These we learnt from Anupamji."

At the time Laporiya was building three tanks Mishra arrived, and

asked: "You have made the tanks but what names have you given them. A tank needs a name. How will you refer to it? You can't say this tank, that tank..."

So, the first tank came to be named Ann Sagar, which meant it was for irrigation to grow food. Another was called Phool Sagar and was meant to raise groundwater levels so that the roots of plants and trees could always be nourished. The third was called Dev Sagar or the tank of the gods and was also meant to raise groundwater levels.

No water could be drawn from Phool Sagar and Dev Sagar though animals could drink from them. It is still so today.

Laporiya is an example of what can be achieved when a village takes charge of its destiny. It shows that water harvesting by itself will not do. Lifestyle changes are needed and respect for Nature is important.

Laporiya also shows us that the best solutions are those that are designed for local conditions. The Chauka system is specific to this area and it won't do to mindlessly replicate it elsewhere.

On the terrace of a beautiful old building belonging to his family, Laxman Singh has an office with a computer and phones. There is a split air-conditioner.

A desk with an imposing chair adds to the formality. He and his brother, Jagveer, pore over pictures and maps as they explain the Chauka's working to us. They have an organisation called the Gram Vikas Navyuvak Mandal Laporiya.

These trappings are needed to coordinate innumerable activities in a day. Laxman Singh continues to spend time out in the fields and pastures.

It appears that he knows every inch of the land. Laporiya's strength is in the way people of the village have come to respect water and restructured their lives based on what they have. Water harvesting is just one of the many things they have learnt to do right. ■

*Umesh Anand and Photographer P. Anil Kumar visited Laporiya to speak to Laxman Singh and understand the Chauka system.*

PICTURES BY LAKSHMAN ANAND



Aziza Tyabji Hydari with Ayaan Dalvi, one of the older children, at the AURED centre

**AZIZA TYABJI HYDARI**

## The AURED way

**I**N 1986, a young teacher of the deaf gave up her job to start her own centre. It was in the kitchen of a south Mumbai flat with just a couple of children enrolled for therapy. But in that little space, she found the freedom to experiment with auditory aural therapy, which was then a new method of helping profoundly deaf children learn to speak and live normal lives.

Aziza Tyabji (later she added Hydari to her name) had spent almost a decade teaching in schools for the deaf and she could see that they needed to reinvent themselves. Young teachers like her required the opportunity to innovate and adopt new methods. But since the schools wouldn't allow that the only option was to step away.

Aziza was joined by her friend and fellow teacher, Sheila Naharwar. Together they set up AURED or Aural Education For The Deaf. Months later Kumud Misra, also a trained teacher, came to work with them. They were the frontrunners.

From the kitchen to a bedroom to a garage to its present location in the verdant and peaceful premises of the King George Vth Memorial at Mahalaxmi, AURED has been a small but spirited effort in changing the way deaf children learn to hear.

In 30 years, more than 800 children have received therapy and remain enrolled with AURED. Currently about 200 children visit the

AURED centre at Mahalaxmi for personalised sessions. There are some 17 therapists at the centre. AURED also has a centre in Hyderabad and affiliate centres in Nairobi and Delhi.

More than 80 per cent of the children who have come to the centre in Mumbai are from underprivileged families and can't afford the ₹3,500 a month that AURED charges. But no one is turned away.

"We take in every child," says Aziza. "We tell parents to pay what they can. Wherever possible we also help parents find hearing aids and fund cochlear implants."

The AURED Charitable Trust funds the centre and the activities around it. Working with the poor is an important part of its mission. It reaches out to slum populations in Mumbai, screening 3,000 children every year.

Bringing in funds, however, has never been their strength. "If we thought about money we wouldn't do anything. We keep doing what we have to do and the money comes," says Aziza.

Asked how difficult it is to raise money, she replies: "Very. We keep sending out appeals and get no response most of the time. But we depend on donors and we do find them. Tata Capital, for instance, just asks us what we want to do and funds it. It is important for us not to be distracted by fundraising. We prefer to be focused on working



A therapist helps a child to recognise sounds instead of teaching sign language and lipreading

with the children. The money always arrives."

### RESIDUAL HEARING

Even a profoundly deaf child has residual hearing. By getting a child to listen and speak, auditory verbal therapy stimulates this residual hearing and restores the messaging between the ear and brain. A cochlear implant or even a simple hearing aid amplifies sound. But that is not enough because a child who hasn't been hearing from birth can't associate sounds with objects, people and emotions. A therapist helps make these connections.

At AURED, a therapist does not use sign language and lipreading to teach the child to communicate. The focus at AURED is on developing recognition of sounds. At first glance this may seem like simply repeating words. But, in fact, the therapy is complex and progresses through sounds at different levels of the child's development.

A normal child, who is not born deaf, listens to sounds and people speaking in its natural environment. Patterns begin emerging and the brain decodes and stores them. Progressively the child gets wired to using these sounds as speech.

But in the case of a deaf child this does not happen. Even if an external device like a hearing aid or a cochlear implant allows the child to hear sounds, the processing of the sounds does not take place. At AURED it is the therapist's job to reactivate the circuitry between the ear and the brain so that the sounds begin to make sense.

"We are exposed to language all the time after we are born and that is how we learn to understand before we learn to speak. Children who are deaf don't have this experience. If you just put the cochlear implant, nothing will happen without therapy. It is just sound which the brain has never processed before," explains Aziza

Since hearing checks are not done widely enough in India soon after a child is born, deafness is detected late. There are children who come to AURED when they are two years old or younger but there are also a great many who are four years or older. The older they are, the



Parents participate in each therapy session

more difficult it is to help them. It is best that they come when they are two years or younger.

"Stage by stage you have to expose them to frequencies which are age related and stage related. It can't always depend on age. If somebody comes in late they still go through all the stages of developing hearing. So, it is very scientific. It is complicated. You have to know what you are doing," says Aziza.

"The children who come to us with a cochlear implant done late, could be four years or older. Integration in such cases takes two to three years. Remember, they invariably also have other problems like mental retardation, slight autism, weak eyesight and abusive family environments. Some children take up to eight years to get integrated."

It is because of this that the therapist must work not just with the child but the parent as well. In fact, a parent sits through and actively participates in each therapy session to be able to continue working

with the child at home. Often getting parents to engage takes time because they are invariably distraught after being told that the children can't hear. They begin by being in denial and acceptance comes over time with counselling.

The Pintos' little girl was two when they discovered that she was deaf. It came as a surprise to them. She was bright and alert and it seemed she was articulating the odd word or two. They had an elder boy with no disability whatsoever. So, they didn't worry about challenges with the second child. But because she didn't seem to be speaking enough for a child at the age of two, the Pintos took her to their pediatrician who said he saw a problem. The audiometric tests that followed conclusively showed that she couldn't hear.

There was more worrisome news in store for them when they went to the Hinduja Hospital. An MRI done there revealed that there was no auditory nerve in the right ear and in the left ear the nerve was very thin towards the brain. She was profoundly deaf. In most cases of profound deafness, a cochlear implant makes it possible to hear. But in this case, the doctor said, an implant wouldn't work. A hearing aid was fitted and they began taking her for therapy to AURED.

Aziza was confident that the Pintos' daughter could learn to speak and that a cochlear implant would work. She went with the Pintos to Hinduja Hospital and persuaded the doctor there to do the cochlear implant.

**'Aziza is the backbone of AURED. There is a lot of bonding. You come to work at AURED even if you are not feeling well.'**

Two years later, the improvements are beginning to be seen — slowly, but dramatically nevertheless. The Pintos' little girl is talking a little. She is self-assured and shows the ability to comprehend what is being said to her. She now uses words like finish, baba, bat, ball, bag, apple and banana. But more importantly, her responses are growing more and more normal.

Twice a week her mother brings her all the way from Borivili to the AURED centre at Mahalaxmi. Here she goes through intensive sessions in listening and speaking. Her mother is involved in every session so that the therapy can continue at home in an everyday fashion.

"It is not just speaking, she also understands a lot. If I tell her something, she understands what I am saying," says her mother. "She is going to school and is in the nursery class. She is learning."

### TEAM SPIRIT

The AURED centre is located amidst grand old trees at the King George Vth Memorial in Mahalaxmi. It is near the racecourse and down the road from Famous Studio, another Mumbai landmark. The trees together provide a thick and cooling canopy. Many NGOs have been given space here and they occupy modest, lightly constructed structures with sloping roofs and ample surrounding space.

One such shed-like structure is where the AURED centre is housed. It has packed into the shed four air-conditioned therapy rooms, a tiny office space with tables, a kitchenette and two toilets. The centre has a busy and congested air about it but everyone and everything seems to have happily fitted in.

Across from here, about 100 metres away, AURED has converted an old and derelict storeroom into a set of tiny rooms from where tele-counselling is going to be done. Many children come to AURED from other cities. The tele-counselling will reduce the number of visits that they will have to make.

Parents who bring children from outside Mumbai need somewhere



The AURED team

affordable to stay if they don't have relatives and friends they can camp with for a while. For such parents AURED is also preparing a room and bathroom adjacent to its main premises.

The mood at the centre on the three occasions we visit, is of camaraderie and bonhomie. There are shared lunches. About 17 therapists, a few office hands, a coordinator and two women helping with the housekeeping make up the staff. A large chart on the corridor wall tells us that everything is planned and lots of work is getting done.

The atmosphere is tension-free as indeed it would have to be if very young children are going to be encouraged to lose their fears and discover the ability to speak. As you walk up a path and enter the centre, Aziza sits to the left. Being AURED's founder she is admired for her vision and the many sacrifices made over the years. It is apparent that in all matters she is the boss. But you won't find her ordering anyone around.

Auditory verbal therapy depends for its success on team work and conciliation. Children are involved and so there can't be deadlines. Each child is different and comes with his or her own set of problems. Ways forward will vary and be customised to suit each case — though the broad principles may well be the same. A therapist therefore should be secure and confident to innovate and seek advice. Everyone's work is constantly reviewed and yet accountability has its limits. Goals are best achieved when they are consensual and flexible. It won't do to be rigid and expect therapists to perform well in an atmosphere of fear.

Salaries at AURED are a pittance and yet everyone is okay with the money because the work is rewarding. There is also valuable experience to be acquired. Therapists come with a post-graduation degree in special education. However, they begin learning from scratch at the AURED centre. In their degree courses, they do not learn the auditory verbal approach though it is what is used elsewhere in the world. So, once at AURED they get the opportunity to upgrade themselves. They also get to attend workshops and conferences the

year round so that they get exposure and keep growing.

Being part of AURED also means getting to participate in its innovations like using art and music for teaching language. These are much more evolved strategies than what gets taught in the degree-dispensing institutions. For instance, AURED has collaborated with Art1st to use art for gaining confidence and building relationships. Similarly, music is being used to enhance the speaking abilities of deaf children and reinforce the auditory verbal approach.

AURED also does audiograms and impedance tests and maps the hearing of cochlear implant wearers. It has developed a device which tests the hearing of infants as small as three to five months of age.

It is the spirit of voluntarism that has fuelled the outfit. "It is magic by Aziza," says Kumud Misra, who is also a member of the AURED Trust. "She is the one person who has empowered everyone."

"Everybody's ideas are considered," says Latha Dilip, who left the Hinduja Hospital in 2006 to join here and lead AURED's outreach. "It is a combined effort which ultimately benefits the child."

"There is a lot of bonding. You don't like not to come to AURED. You come to work even if you are not feeling well," says Armaity Khambatta, who has been working at AURED for 15 years. She is currently the coordinator, always busy updating the timetable board and getting things done.

"Aziza is the backbone of AURED," says Armaity. "She is not like a boss or anything. You are so free to talk to her and she listens to your problems."

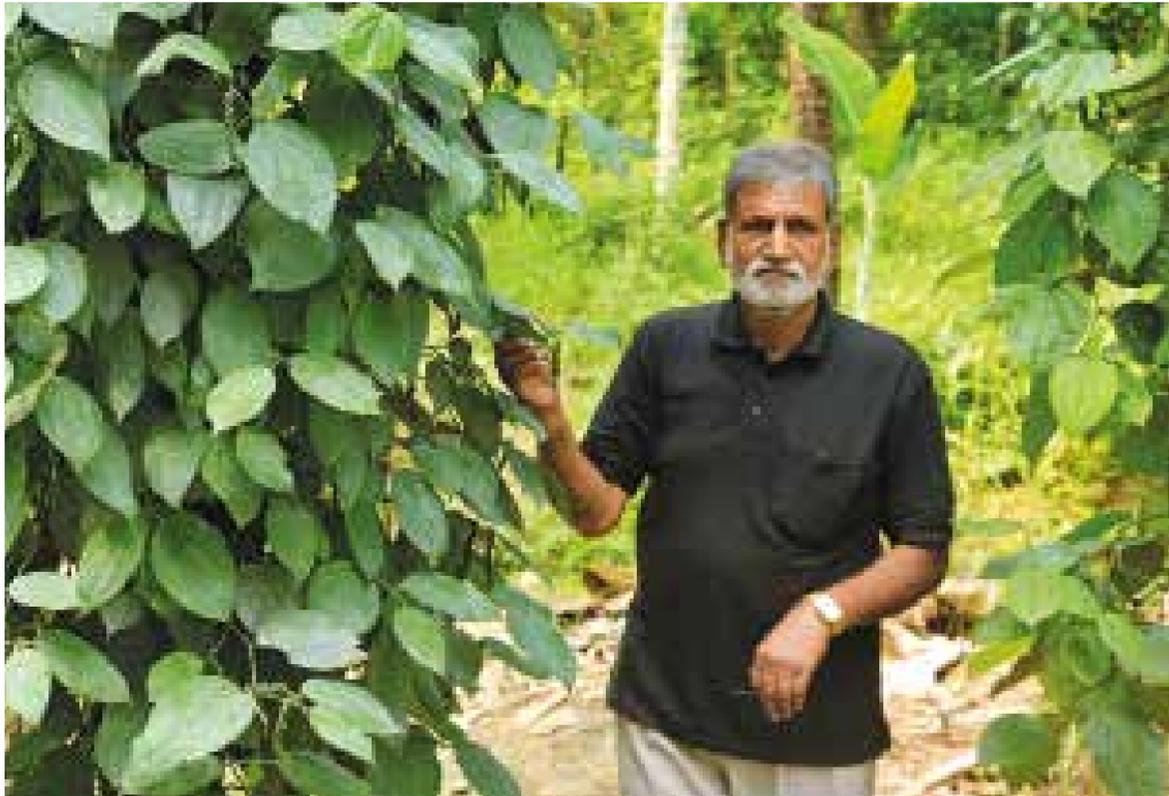
Aziza was fortunate to learn the auditory verbal method from some of the best practitioners in the world who would visit India and continue to do so. By implementing it at AURED she was far ahead of what was being practiced in India at that time. Interestingly, special education courses in India still don't teach the auditory verbal method. But AURED's work shows what could be achieved if they did. ■

Umesh Anand visited the AURED centre in Mumbai. Lakshman Anand took the pictures.



Kumud Mishra, on the right, in a therapy session with a child and his mother

PICTURES BY SHREE PADRE



Venugopal in a pepper garden where, with his advice, yields have increased

**M.N.R. VENUGOPAL**

## A Pepper Doctor

**I**N the sleepy villages of Sirsi in Karnataka an economic revolution is taking place. In just four years, farmers have tripled their income by growing pepper, the king of spices. Word of pepper's potential has spread to five districts of Karnataka — Uttara Kannada, Shimoga, Chikmagalore, Hassan and Kodagu — and here too farmers are making money by growing the black spice.

The man behind this silent transformation is 68-year-old Dr Madhugiri Narayana Rao Venugopal, a retired ICAR scientist, affectionately called 'Pepper Doctor'. By assiduously sharing his knowledge with farmers he has increased their yield of pepper by three to four times.

Dr Venugopal was born in Madhugiri in Tumkur district, the eighth child of Narayana Rao and his wife, Seethamma. In 1977 he joined the Central Plantation Crops Research Institute at Kasargod. He retired in 2009 after 32 years of service from the Regional Research Station of the Indian Institute of Spices Research, Madikeri, as its Principal Scientist and Head. By then he was an acknowledged expert in crops like arecanut, coconut, pepper, ginger, turmeric and cardamom.

Venugopal built a house in Mysore and was looking forward to a quiet life with his family. A few months into retirement, he was invited to a farmers meet in Madikeri. Ravi Ganapathy, a farmer,

struck up a conversation with him. "You are a man of immense knowledge," he said. "Transfer your learning to those who need it instead of killing it."

His words got Venugopal thinking. He decided he would spend his time helping the farming community. Venugopal began attending meetings of farmers and he didn't miss a single opportunity to address them. By now he must have attended around 1,300 such meetings. "All I needed was ₹250 for travel," he remarks. Alongside Venugopal began identifying farming clusters that could increase their yield of pepper to more than 1,000 tonnes annually.

Why did he choose pepper? "There is money in pepper," he says. "Coffee growers contend with white stem borer. Arecanut farmers worry about over-production and tea planters have high overheads. Pepper production is stagnant but farmers are keen to increase their income. What they lacked is guidance and adequate planting material," he explains.

"Dr Venugopal has been coming often to our taluka since 2012. At that time, our pepper production was around 75 to 80 tonnes. Now it has reached 300 to 320 tonnes. Within the next two to three years, we will be producing 800 to 900 tonnes," says Mahabaleshwar B.S., Assistant Director of Horticulture, Siddapura,



Venugopal with a group of pepper farmers with whom he has formed strong bonds of trust

in Uttara Kannada district.

In the 10 years since he retired, Dr Venugopal has probably achieved more than in the 30 years he worked for the government. Not only has he tripled the income of farmers he has forged deep bonds with them, giving rise to a new model of farmer-scientist relations.

"Scientists use power point presentations to train farmers. But cut and paste guidance isn't enough. What works for pepper plants in an arecanut garden won't suit pepper growing on a coffee farm. Scientists should demonstrate their learning on farmers' fields. Otherwise no cultivation package will succeed," he says.

In India pepper is cultivated as a mixed crop with arecanut, coffee and tea, unlike in Vietnam, the world leader in pepper production, where it is a mono-crop. "Pepper doesn't require much space or irrigation. With the right agronomic practices we can augment production phenomenally," says Venugopal. In another two years Karnataka will produce 65,000 tonnes of pepper or all the pepper India consumes, he says.



A handful of pepper

### BONDING IN CLUSTERS

Dr Venugopal travels at least 12 to 15 days in a month. The farms are not very near. A visit to Sirsi, which is nearly 1,000 km away, requires an overnight journey. He travels by bus and train. In fact, he admonishes farmers if they offer him special attention and happily stays in their homes. What's more, he doesn't accept a single rupee for his services.

"My pension is enough for my family", he says. "I don't take any money from small farmers. I receive a consultation fee from big farmers that I use for small farmers. They arrange food, bus charges and accommodation, if required."

The first time Venugopal visits a new garden, he enquires how many pepper vines it has. If the number is less, he suggests the farmer plant more. "I tell them this is your yield potential. I ask them if they are ready to achieve a production of 300 to 400 kg per acre with 100 vines.



Farmers have been encouraged to set up gene banks and nurseries

It is not difficult. If the farmer agrees, I advise him from time to time. I also put forth one condition — farmers should implement 80 per cent of my recommendations and inform me. Otherwise, I don't go there again." Of course, there are defaulters — as many as six out of 10!

He also has a clear strategy. First, Venugopal identifies clusters that can grow 1,000 tonnes of pepper. Next he finds key farmers — those who are opinion leaders and can share knowledge. He has so far identified 14 clusters in five districts stretching from coastal zones up to an altitude of 1,200 metres with rainfall from 30 to 300 inches.

"After assessing rainfall, soil and so on we can evaluate in general the problems being faced by farmers. But we can't provide the same advice to the entire state," he says. In each cluster, Venugopal develops a demonstration plot in the garden of a key farmer. In Uttara Kannada district he has developed three demonstration plots — in Gadikai, Neernalli and Chavatti.

In a way, the clusters act as relay centres of his recommendations. Whenever there is the possibility of a pest attack or quick wilt disease, he alerts the clusters over phone which, in turn, alert their communities. Pepper farmers have formed groups on WhatsApp and they also have organisations. So a lively exchange of information takes place. In the Siddapur taluka alone there are eight such groups. The Sirsi taluka has 10 groups. "In the past, no farmer discussed his pepper farming experiences. Now no development remains uncirculated," remarks Mahabaleshwar.

**'He is always the leader and we are happy to follow. Whenever he finds an improved pepper variety he distributes it.'**

Venugopal communicates very carefully. So he doesn't offer advice over phone when he is travelling. At home, he receives 15 to 30 calls every day from pepper farmers. If it's a very special case, like a call from a farmer in the northeast wanting to replace rubber with pepper, he suggests a team visit suitable plots and he facilitates training. In a year six to eight such study teams arrive to undergo training.

"Our garden becomes his. He keeps tabs on our agricultural practices and guides us. He takes up all our farming worries. But the income accrues to us," says Chavatti Shridhara Bhat, a farmer in Sirsi. "When he visits our farms, he is always the leader and we are happy to follow. He even interacts with our workers. Whenever he finds an improved pepper variety, he takes pains to distribute it to all farmers. Varieties from the northeast have been brought here. Our varieties have gone there. Venugopal is like a friend or relative for us."

### THE RIGHT RESEARCH

The most popular variety of pepper here is Panniyur-1. Pepper growing regions have millions of this variety. But it has a peculiar problem. During its spike formation stage, if there isn't enough light, the plant produces only female flowers instead of bisexual ones. Laughs Venugopal, "Panniyur-1 is naughty but also a champion. We have had to change production technology because Panniyur-1 is planted very extensively."

With early irrigation and by preponing flowering, farmers can ensure there is adequate light for a good crop. This is recent acquired research which is being widely disseminated.

A farmer in Somavarpet had been harvesting 28 tonnes of pepper from 38 acres. One year his pepper vines were attacked by quick wilt disease and he got no yield. He discovered that the disease had originated in his neighbour's garden. Scientists advised him to start control measures from the neighbouring garden. That worked and even after 26 years his vines are healthy. But his neighbour's vines turned sick and had to be replanted. "The acid test of any experiment is in farmers' fields," says Venugopal.



Walking past pepper vines followed by farmers

One reason most arecanut farmers were wary about growing pepper is its frequent mass mortality. If there is uninterrupted rain for a few weeks, the dreaded quick wilt disease invariably wipes out vines. Farmers were under the impression that vines have to be constantly replanted to be free of quick wilt. But this fear has considerably declined due to Venugopal's advice.

### THE GENE BANKS

An important prerequisite for pepper development is quality planting material. Throughout his career Venugopal noted that most saplings didn't measure up. Some had symptoms of nematode, others were infected with *phytophthora fungus* or virus. Very few nurseries raised healthy planting material.

To overcome this problem, Venugopal insists that every cluster create its own gene bank. Three gene banks have already started in the districts of Sirsi, Shimoga and Hassan. Research and nurseries should go hand in hand is Venugopal's motto. He has also trained farmers and nurseries to produce pepper plants locally. Today there are 58 farmer-owned nurseries.

The problem with planting material is that only one variety and production technology is promoted whereas the Western Ghat region contains great varietal diversity. Karnataka has 14 documented varieties. Kerala has over 70. "In some areas, we don't want champions. We need all-rounders — cultivars less susceptible to disease, less sensitive, even if the yield is moderate," he says.

With this objective Venugopal arranged a nine-day varietal selection process in pepper gardens three years ago. "We selected 17 varieties in Uttara Kannada. In an area where all pepper vines had died, we found a variety called Tirupugere. Both Okkalu and Kari Malligesara varieties fetch ₹80 more per kg in the local market. Nine out of 17 local cultivars are quite promising and deserve to get geographical identification," he says.

Take the case of Okkalu. Chavatti Shridhara Bhat was growing this variety on his farm. But it was yielding only 500 gm of crop per vine. Bhat was very disappointed and was all set to cut off his Okkalu vines. Venugopal advised him to give his vines the correct dose of nutrients. Now the same variety produces four kg per vine and traders are paying Bhat ₹80 more for his pepper crop.

### LEADER OF FARMERS

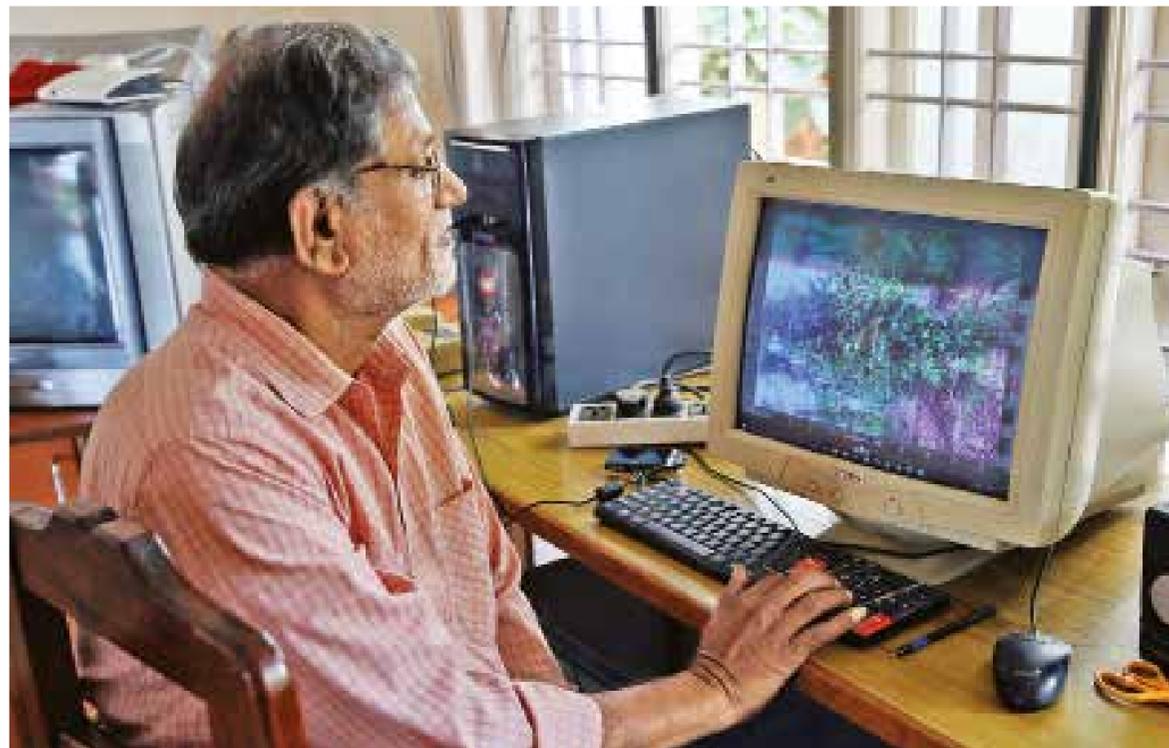
Two years ago Venugopal fell seriously ill. After returning from Assam in June 2015, he got paralysed. The disease, called GB Syndrome, affects one in 100,000 people and results from excessive antibody production for a virus. His vision was affected and he couldn't even lift his hand. For 23 days he was virtually helpless.

Even at this critical juncture, he was more concerned about the thousands of farmers for whom he was a leader. He phoned some of them to whisper a two-line message, "I don't know if I can visit you again. Please stick to my recommendations." Groups of farmers started rushing to the hospital. Everyone began praying for him. Eventually, "there was a miracle, a rebirth," says Venugopal. He began recovering and after two and a half months he was back on his feet, travelling to the fields of farmers.

The hospital bill came to nearly ₹10 lakhs. Farmers contributed to ease the financial burden. "You are our asset. You have to live for us. We have benefitted so much thanks to you. If every farmer contributes just five kg of pepper we can easily clear this bill," they kept saying. The Indian Institute of Spices Research reimbursed some money.

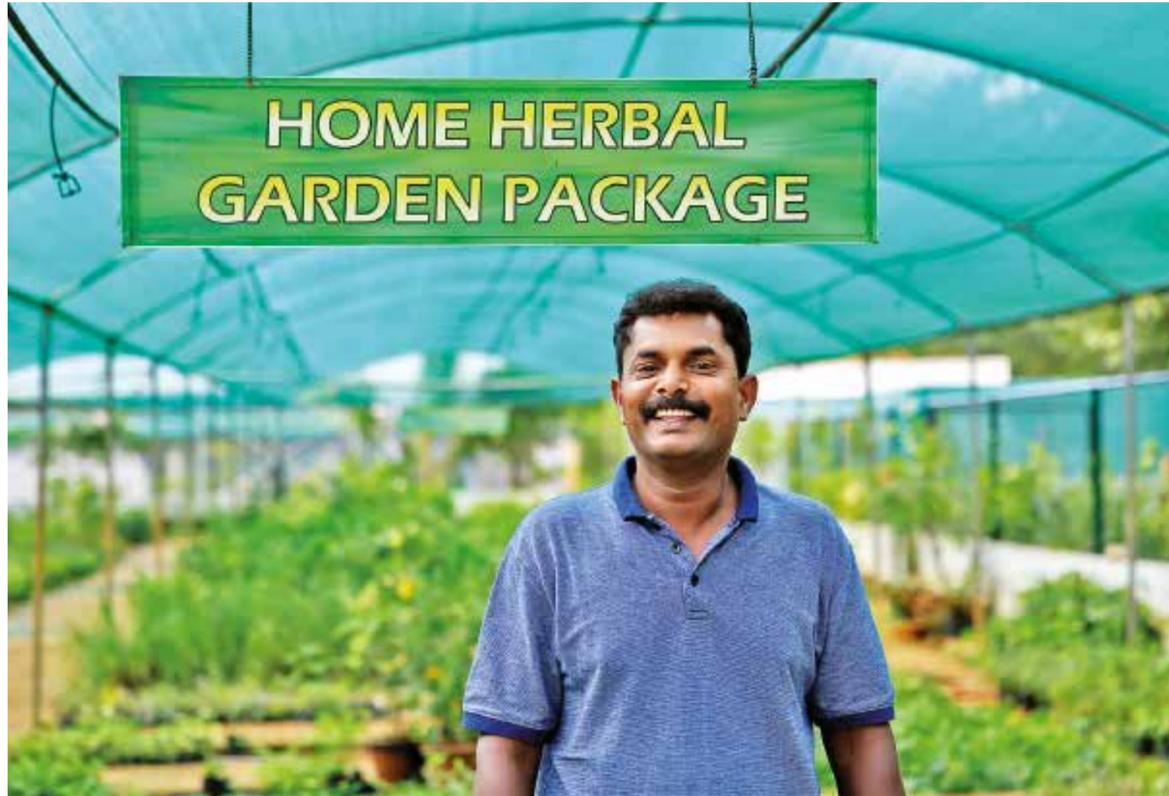
Venugopal works quietly, away from the limelight. Yet he has become a legend in these five districts. No ICAR scientist has his dedication and hard work or guides farmers with so much sincerity. There are no parallels to our pepper doctor, say farmers. ■

*Shree Padre travelled to Mysore and Sirsi to speak with farmers and spend time with Dr Venugopal. Yajna took the pictures.*



Venugopal at his home in Mysore

PICTURES BY YAJNA AND GANESH BABU



Ganesh Babu with rows of medicinal plants at the FRLHT campus

## GANESH BABU

# Reader of Plants

YOU can see hundreds of medicinal plants blooming on the leafy 15-acre campus of the Foundation for Revitalisation of Local Health Traditions (FRLHT) in Bengaluru. This vast and rare collection from the forests of India is the accomplishment of Dr Ganesh Babu, a botanist at FRLHT. He has painstakingly scoured jungles, spotted medicinal plants, understood their qualities and brought them here.

"Just take a look at our campus," says Darshan Shankar, managing trustee of FRLHT. "We have the best landscape in the world. Noted landscapers from New York were amazed to see this unique experiment. We have 1,500 medicinal native floras in the same campus."

Around 1,400 have been collected by Ganesh. The plants, both tropical and sub-temperate, thrive under his loving care. "He has green fingers. The plants he touches invariably bloom," says G. Hariramurthy, Advisor to TDU (Trans-Disciplinary University) that is associated with FRLHT.

The plants aren't just a visual delight, a feast for the eyes. They are for the people of India to take home and nurture and heal themselves.

A garden, believes Ganesh, should enhance your health, your environment. He has pioneered the concept of landscaping with

medicinal plants or 'functional gardens' as he calls them.

FRLHT has been marketing herbal gardens in rural and urban areas since 1994. The idea has taken root. Ganesh says in 15 years an estimated 400,000 urban herbal gardens have been raised throughout India. Half of them are in Bengaluru.

"Our vision is to make people self-reliant in primary health care. We tell them how to make herbal medicines at home. There are about 30 ailments, from diabetes to ringworm, that can be successfully managed with herbs," says Ganesh.

The city would be cooler too if native shade bearing trees were grown instead of exotic species. Bengaluru's avenues are lined with flowering exotic trees like *Tabebuia argentea* and *Jacaranda mimosifolia*. But the trees don't have an extensive canopy and once their flowering season is over, they are pretty useless.

Ganesh Babu was born into a very poor family in Tamil Nadu. His father, Muthu Kamachi, was a newspaper seller and his mother Amirtha Valli worked as a farm labourer. He has three brothers and two sisters. "We used to work as labourers on farms and construction sites on some school days. One by one my siblings dropped out of school due to poverty. I kept studying with hope in my heart at the Schwartz Higher Secondary School where Dr A.P.J. Abdul Kalam did



*Pandanus odoratissimus*, an intelligent medicinal tree



Ponds with this mix of plants don't need regular maintenance



*Aristolochia littoralis*, also called Lady's Purse

his schooling", he explains.

Ganesh scored high marks in botany. His teacher, Ida Mercy Sudantira, encouraged him to take up the subject seriously. But during his final exams in Class 12, his father passed away suddenly. The family was forced to migrate to Madurai city where they took a place on rent. "For the first time we had electricity," he recalls.

Ganesh began working in a powerloom. His sister Geetha got a job as a government health worker and Kavitha became a tailor in a local garment shop. His family started insisting that Ganesh go to college. "If not for my two sisters and mother, I would have continued life as a dropout," Ganesh recalls his eyes looking into the distance.

He joined the American College, opting for a bachelor's degree in botany. It was at this college that two lecturers became mentors for him. Ganesh could only afford a very sparse meal. Fed up of eating the same food every day, he stopped taking his lunch to college. John Jebaraj, his botany lecturer, noted his passion for botany and that he wasn't eating lunch.

One day he told Ganesh, "I will provide you lunch every day" and handed him a very light tiffin box. "Go to the lab and open it." "Must be *dosa* or *chapati*", thought Ganesh. When he opened it, he found it was neither. It was a plant!

He went back to the lecturer who coolly said, "Yes, that's your lunch. I will give you a plant every day. You identify it. This knowledge will help you in future." Jebaraj had 300 plant species on his terrace. He made Ganesh identify all of them.

"Unlike the other students who graduated with bookish knowledge, I was a trained botanist in plant identification," says Ganesh. Another lecturer, Winfred D. Thomas suggested that he study further and offered to pay his fees but Ganesh's priority was to earn ₹2,000 to support his family. Thomas advised him to join the FRLHT. He was hired almost on the spot. "I was jobless for only one hour", he recalls.

Ganesh joined the Medicinal Plants Conservation Park, an FRLHT-DANIDA initiative to conserve medicinal plants at Madurai. His job

was to maintain the nursery onsite. He created an ethno-medical forest, after interacting with herbal practitioners and carrying out an extensive botanical survey of Madurai and its surrounding districts.

He says he practically lived in forests from 1997 to 2000 and learnt a lot from tribals. "They have profound knowledge. I acquired more knowledge from them than from books. They showed me *Centella asiatica*, a medicinal plant with the fragrance of lemon," he says.

In his search for medicinal plants Ganesh also came across many amazing herbal healers. He mentions Ambalathady Kalyani Vaidyar, a bonesetter, 40 km from Madurai who treats people free of cost and Thippeswamy from Lakshmisagara in Chitradurga, an expert on snakebite. Thippeswamy told Ganesh about the plant he uses as a remedy for snakebite.

In 2003, after being appointed as botanical consultant at FRLHT he undertook a survey of the forests of south India. With the money he earned, he completed his M.Sc. in botany from Annamalai University through distance education and subsequently his Ph.D. Ganesh now works as an assistant professor with a team of 20 botanists and is always on the move. About 6,000 medicinal plants are used in Ayurveda. Ganesh's contribution to FRLHT's herbarium is 4,000 medicinal plants.

### SHAPES AND USES

An *aloe vera* plant sits in a glass container on Ganesh's table. He asks us a rhetorical question: "How did our ancestors identify medicinal plants without testing methods?" We don't know. So he asks us to follow him to the garden.

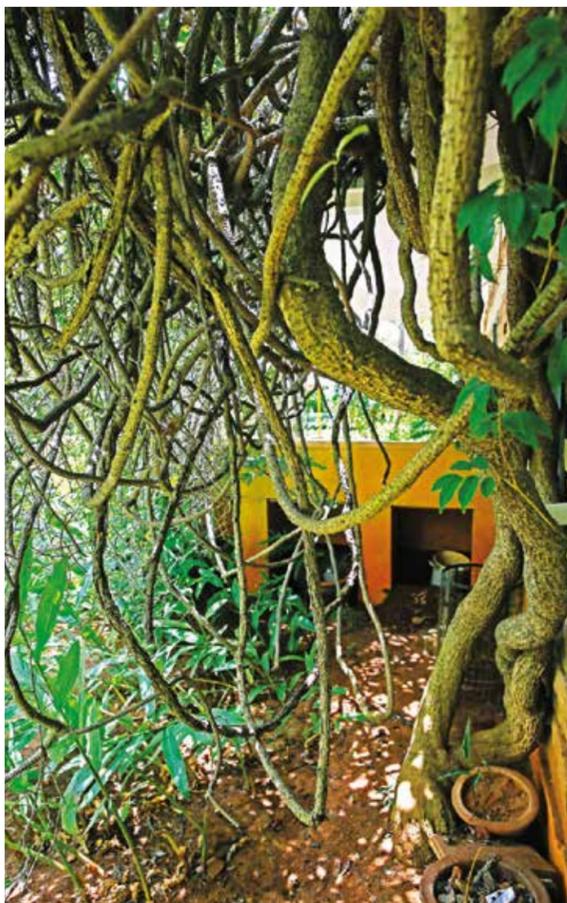
The first plant he shows us is *Centella asiatica*. "What does the shape of this leaf resemble?" he asks, and then answers, "the brain." "This plant is used for memory enhancement. In Tamil, they call it *Saraswathy Vak*. The name suggests that it is linked to education. Our ancestors gave local names to plants after a lot of thought."

*Mangroli* (*Mangaravalli* in Kannada), is a vine whose stem has four

**‘The plant will grow according to the feelings you have for it. If you throw it somewhere, forget about it, the plant may not grow.’**



Elaeocarpus floribundus or Edible Rudraksh from Arunachal Pradesh



Vayu Vidanga grew with love and affection

angles. “This is *Cissus quadrangularis*. It reminds us of bones. Yes, it is used in bonesetting and has a high quantity of calcium. In Tamil Nadu people eat it as a food, as *papads* or chutney.”

Local names provide clues to researchers. The Kannada name of *Shatavari* (*asparagus racemosus*) is *Halavu Makkala Thayi* (mother of many children). “The plant’s decoction is given to increase lactation. The name suggests that a mother can bring up many children with this plant’s help.”

A huge 13-year-old vine, called *Vayu Vidanga* (*Embelia ribes*), partially masks a small building in the campus. Ganesh recounts the amazing story of how this plant was raised in FRLHT.

Attempts to grow *Vayu Vidanga* by many botanists failed. When Ganesh brought the plant to the campus he thought it would meet a similar fate. After planting, he observed it for many days. *Vayu Vidanga* remained weak and stunted. It just wouldn’t grow.

Then Ganesh got a brain wave. He started talking to the plant. He appreciated its virtues. He asked some of his colleagues to ‘keep the plant in good humour’ by frequently ‘talking’ to it. The plant started responding. It grew bigger. Today it’s stout and sturdy. “The plant will grow according to the feelings you have for it. If you throw it somewhere, forget about it, the plant may not grow. Instead, if you express your love, talk to it, spend time with it, like it was your relative or friend... just see the results,” explains Ganesh.

We are then introduced to a vine whose flower resembles a bird. “This is *Aristolochia littoralis*. It is used to tackle malaria and poisonous bites,” says Ganesh. He picks up the vine’s dried seed. It opens up like a small umbrella. “This is called Lady’s Purse. After drying, the seed has this inbuilt mechanism to tilt a little with the wind. It goes on dispersing seeds for 18 months to ensure some seeds fly into a conducive climate and its progeny continues.”

We come across a tree whose stems have a thorny outgrowth. This tree (*Bombax ceiba*) is called *Kempu Booruga* in Kannada. Ganesh was surprised to note that the thorns of the tree were frequently removed by girls living in a hostel nearby. He found out that the girls used it as a remedy for pimples. The thorn was crushed with a few drops of lime and the paste applied on pimples. “How did the girls get to know? The thorns in a way look like pimples on the face”, he interprets.

As Ganesh takes us around FRLHT’s acre campus we realise each plant has a lesser known trait, a special feature, a story, a meaningful name in some language or the other. “This huge ex-situ collection of medicinal plants is a great opportunity to researchers to document the behavior of each plant outside its original habitat,” says B.S. Somashekhar, Associate Professor, FLRHT. “They don’t have to travel to a distant forest anymore.”

### CITY OF PLANTS

Delving into history, Ganesh explains that practitioners of traditional medicine or *vaidyas* started the concept of nurturing gardens. The *vaidyas* needed medicinal plants when the king became ill. But they couldn’t get these plants quickly since many were located at a distance. To overcome this problem, the *vaidyas* began growing medicinal plants near the palace. These were the first gardens.

“Slowly the aesthetic angle crept in. Over the years, gardens lost their original purpose of curing ailments and turned into ornamental objects of beauty,” he explains.

Ganesh realised that people were stuck with the notion that a garden merely needed to be beautiful. “We visited some families who had taken medicinal plants from us. They had placed our plants in an obscure corner. We asked them why. They said our plants weren’t good looking. So I decided to bring these plants upfront by relocating them in the landscape. The plants would get showcased and the gardens would get upgraded into functional ones.”

Nandini D., a consultant at FLRHT who campaigns and trains people to develop herbal gardens says at first it was hard to make people understand the concept of a medicinal garden. “In institutions which had horticulturists it was difficult to make inroads because



FRLHT has 450 medicinal plants and offers three types of packages for people keen to raise a herbal garden

their mindset was fixed on specific colours and plant species for aesthetic value”, recalls Nandini. “Now the situation is far better. We are able to get people interested by showing them gardens we have already developed.”

### COMPLETE PACKAGE

Most nurseries in Bengaluru don’t have more than 20-25 medicinal plants. FRLHT’s Amrutha Vana herbal garden has about 450 medicinal plants. For those keen to buy plants, FRLHT offers three types of packages. You can select your plants according to the space you have.

A complete package contains 60 plants priced at ₹1,200. The advanced package has 40 plants and the basic package has 20 plants. The plants are priced very nominally thanks to the support FLRHT gets from the National Medicinal Plants Board under the Union Ministry of Health. A free guide with information on identification, method of growing plants and use for various ailments is provided along with the plants. Two publications, *Angaiyalli Arogya* in Kannada and *I love my healing garden* in English, published by FRLHT, have information on how to prepare medicines from these plants. More details are available on the FLRHT website ([www.frlht.org](http://www.frlht.org))

“Earlier we used to offer plants that had to be combined with three to four plants for tackling ailments. Then it dawned on us that this creates problems. For urban families, getting the other recommended plants is not easy. So, now we have prioritised single plants that can be used for a few ailments,” explains Ganesh.

Lots of people live in small apartments but would like to have a herbal garden. FRLHT provides advice. They have identified plants that can be grown in cocopeat, in grow bags or vertically on a wall.

The institution keeps an ear to the ground for information on new plants. “If someone says a plant in a particular area is good for a disease, we check its efficacy. Only then do we recommend its use to people. It’s not like anyone can use any plant. We offer one-day training mostly on our campus,” says Ganesh.

Two new state-of-the-art courses are being introduced by Trans-Disciplinary University (TDU) keeping in mind the interest shown today by practitioners of allopathy. “Horticulture therapy is now



Adatoda vasica and Justicia adhatoda growing in the FRLHT campus.

being accepted. Several hospitals have realised its importance in post-operative care and have appealed to us. Shortly we will be starting a one-year course on horti-therapy that will include medicinal plants,” says Dr Balakrishna Pisupathy, Vice Chancellor, TDU

“Every year students who graduate don’t do anything innovative. They stick to the same old ideas and business plans. Landscaping with medical plants will give them much better job opportunities,” says Ganesh.

Currently Ganesh is developing a conservation park in Bellary which is likely to become a landmark. It is for red-listed medicinal plants. “If we conserve these endangered species in one area, we can reintroduce them whenever necessary.” The park already has 2,100 plants and 100 are rare and endangered species. Its another feat by Ganesh, the botanist with green fingers. ■

Contact: Dr Ganesh Babu: Phone: 9900239450; ganesh.babu@tdu.edu.in

Shree Padre and Photographer Yajna travelled to Bengaluru to meet Ganesh Babu and see the FRLHT campus with its many wondrous plants.

PICTURES BY P. ANIL KUMAR



Mohammed Gafur Chhipa in his 'hanging garden'

## MOHAMMED GAFUR CHHIPA

# Titri's Headmaster

WHEN the Government Upper Primary School at Titri village opens every morning, it is Mohammed Gafur Chhipa, the headmaster, who personally unlocks the gates. And when classes are over in the late afternoon, it is he again who closes the school.

For 13 years since Chhipa took over, it has been like this. Not a day has been different. He has always been the first to arrive and the last to leave, bringing to Titri's school the systems and rigour that have earned it the distinction of being one of the best government schools in Rajasthan.

"I like to be here by 7.30 am, which is half an hour before the children come and the school day starts. There are many chores to be done such as making sure the classrooms are cleaned and that there is water in the overhead tanks. Children like to come to a school which is neat and clean and has functioning systems," says Chhipa.

As we talk, we are in Chhipa's hanging garden. It is no more really than a few potted plants strung from steel pipes that ring the school's courtyard. But it is prettily done and it is to him as he envisioned it — a hanging garden. Once, twice, thrice... he uses the words hanging garden as though to make the point that it can't be anything less.

It is in his mind's eye that Chhipa has first seen the transformations

that this little government school has gone through under him. There have been no consultants to advise him, no model to go by. He is an original who has done things the way he imagined they should be.

Chhipa grew up not far from Titri, which is in the Bhim block of the Rajsamand district, a drive of a few hours from Udaipur. Incredibly, he has never visited any of India's big cities, except Jaipur, where he went briefly to get an award from the government for his neat school. Occasionally he has gone to Udaipur when summoned by education department officials. The death of a relative once took him to Ahmedabad.

But these brief trips apart, Titri has been his world. With only a school degree, he took a chance and got trained as a government teacher. That was in the eighties. After a few rural postings elsewhere, he found himself back as headmaster with an opportunity to grow the school of his dreams.

When he took over, the school consisted of just three rooms and they were poorly maintained. The toilets were in a mess. There was no boundary wall. No provision had been made for safe drinking water. Outside the classrooms there was just a muddy patch, which was partly a ditch.

Absenteeism among the students was high. Teachers wouldn't show



Children poring over their books. Classrooms are neat and well lit

up and when they did, they took classes indifferently. In the absence of an effective administration, they couldn't be held accountable.

But Chhipa has over time made many of these old problems disappear. "I am lucky to have been here for 13 consecutive years. It has made it possible for me to work consistently at implementing my ideas and improving things," he says. "Sometimes the government shifts you just when you have begun doing some good work. I have been here throughout," he clarifies.

The school now has eight well-lit classrooms and an office for the headmaster, where he sits. There are green boards and desks in the classrooms and rugs for the children to sit on. The walls and floors have been repaired and so there is no more the feeling of being in a dilapidated structure.

To further brighten up the atmosphere, there are charts and educational posters on the classroom walls. The corridor outside the classrooms is also full of pictures and drawings. There are notice boards and it is evident that they are being regularly used.

One of the noticeboards has the names, photographs and phone numbers of all the teaching staff, making it clear that nothing short of full accountability will do. Another board lists the names of donors who have helped fund the improvements in infrastructure.

"I have set up a users' group in the village to support the school. I go to them when I need money for small improvements. I also go to the gram panchayat. Funds aren't always available from the government though there are a lot of schemes which can be utilised if you know about them and can figure out ways of accessing them. For good work, if you are inventive and honest, you can invariably find money," explains Chhipa.

The courtyard, which has white marble flooring, was funded by the panchayat at his request. It has made a dramatic difference to the way the school premises look. "The panchayat paid for the material and the labour charges and got the work done. But the idea and the design was mine. I got done precisely what I wanted, including a system for



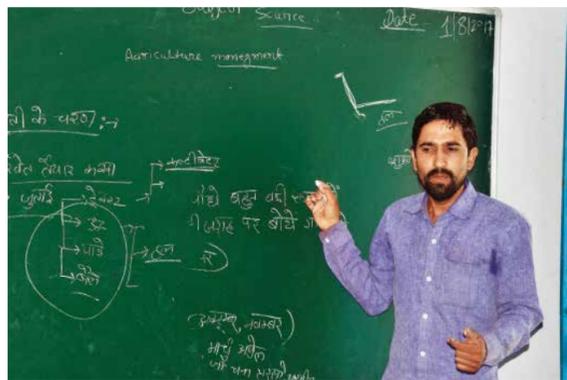
Nenu Devi, who has been making the midday meals for 12 years



The school has an RO system



Headmaster Chhipa with a bunch of happy students



Yogesh Chander, the maths and science teacher



A teacher with her small class of students

## The school serves fresh midday meals and Chhipa says there is no problem feeding some 200 children.

taking water directly to the plants on the periphery," he says.

"When the courtyard was made, I realised that there was open access to it. There was nothing to stop someone from bringing a motorcycle or a car on to it. But I wanted it specifically for the morning prayer and assembly and for the children to play. So, I made my hanging garden to cordon it off. A barrier of steel pipes and flower pots hanging from them was all I needed. Now it is protected and is only for the children."

Cleanliness and hygiene are emphasised. There are separate toilets with running water for boys and girls. A row of taps is for washing hands. There are bins for litter and nothing lies around. Water is pumped from the open well and when the level occasionally falls, a tanker is summoned.

A rainwater harvesting structure has been put in place for whatever little rainfall Titri gets in the year. Rainwater is collected in an underground tank and used for various maintenance purposes.

In terms of water, undoubtedly the most important addition has been a reverse osmosis unit which ensures that there is clean drinking water for the entire school. The RO is in the kitchen and on the wall outside there are taps from which children can drink directly and bottles and pans can be filled.

The school's kitchen serves fresh midday meals and Chhipa says there is no problem feeding some 200 children every day. He has bought a few iron drums in which he stocks the supply of wheat and



The corridors are full of colourful pictures and illustrations

rice and dal that comes from the government. The drums ensure that the stocks aren't exposed to moisture and rodents.

Asked if it is a challenge to coordinate meals and ensure that they are of good quality, Chhipa replies: "We've been serving midday meals since 2002 and there haven't been complaints about quality. It requires some supervision and I check out the kitchen once in the morning, but for the rest there are three women who do the work and they are responsible people."

Chhipa is by nature a team player who finds it easy to be persuasive and consensual. "Officergiri se kuch nahin hota," he says. "Sab ko saath le ke chalna padta hai. It won't do to issue orders. You have to carry people along."

He has 10 teachers working with him. There are staff meetings and performance reviews. Lesson plans and teaching methods are examined. Sometimes he observes teachers in class and gives them feedback.

"He makes everyone feel like they are part of a large family," says Yogesh Chander, the maths and science teacher. "I belong to another side of Rajasthan and I am living here alone because of this job but Gafurji never lets that get me down." Chhipa inspires young teachers like Yogesh to commit themselves to the school. For instance, Yogesh has donated Rs 15,000 of his personal money to the school because some purchases had to be made.

Questions to Chhipa on teaching methods and course content don't get very detailed responses. He prefers to talk about his administrative achievements. But it is laudable that most of the children from this school go on to the higher school and do well for themselves.

"In 13 years, I've seen a student of mine join the IAS and another the IPS. There are others who have got jobs in the private sector. Our students go to the higher classes and most of them cope well."

For the Titri school under Chhipa this is the best measure of its success apart from efficient administration. ■

Umesh Anand and Photographer P. Anil Kumar visited Titri village.



The school's rainwater harvesting system



Children head home after school



### Harvesting Rain for Profit

From: Shri. Murali,  
Village: Madur, Kishanganji district, Tamil Nadu

Madur, a small hamlet with over 1000 people, is a village of Madur district, Tamil Nadu. It is a government school and a government hospital. However, a village water supply system was not developed. The water supply system was not developed. The water supply system was not developed.

To overcome the problem of water supply, the TVS Motor Company (TVS) started a project to supply water to the village. The project was started in 2008. The project was started in 2008. The project was started in 2008.

The project was started in 2008. The project was started in 2008. The project was started in 2008. The project was started in 2008.

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## ‘From info to entitlement is a long journey’

### Osama Manzar says SoochnaPreneurs and an app are going to improve the delivery of government benefits

Civil Society News  
New Delhi



Osama Manzar: ‘People are sitting on information, blocking it and making it a commodity that is saleable through bribes’

THE Digital Empowerment Foundation (DEF) has been delivering government entitlements efficiently to villages in 350 locations since the past one year. It has trained 100 information intermediaries called SoochnaPreneurs who go door-to-door with an Android tablet and a Mera App, helping villagers know about the government’s schemes and ensuring they get their entitlements.

Grassroots NGOs and activists have long pointed out that the poor don’t get their entitlements. The money either remains unspent or is siphoned away by corrupt intermediaries.

The Union government’s response has been to transmit entitlements digitally. Biometric identity has become the new instrument of delivery. The aggressive push of the Pradhan Mantri Jan Dhan Yojana and Aadhaar has increased hugely the number of people with bank accounts making it possible to transfer money directly for some schemes.

But digitisation is an imperfect system. Connectivity is poor in rural India. There is illiteracy. Sometimes biometrics don’t match. Cumbersome government processes and red tape are yet to be sorted out. Knowing about schemes and then downloading forms and filling them is a challenge.

“A simple piece of information of an entitlement has to traverse at least 10 layers before it gets into the bank account of the beneficiary,” says Osama Manzar, Founder and Director of DEF. In an interview with *Civil Society* he spelled out DEF’s strategy for making things work.

#### So, who is a SoochnaPreneur?

The SoochnaPreneur project is based on the premise that there is a serious lack of information in villages and people suffer as a result both as consumers and producers. We need to concede that they need information, one reason why RTI (right to information) came into the picture.

#### They need to know what their entitlements are first, isn’t it?

It isn’t just about knowing. Information comes in many layers. I would say knowing is the beginning

**‘We realised at our Soochna Seva Kendras that there was space for the role of an intermediary. We put in place Soochna Sevaks and that’s how the idea of SoochnaPreneurs came into being.’**

of the suffering caused by lack of information.

You can advertise on radio or make it known by word of mouth that a pension fund is available but that’s not the end of it. Where is that information available in detail? No idea. You go to the panchayat or the block office they give you half-baked information. That’s the first layer.

If you get the information how do you access it like say fill a form. You will be lucky to get the form. Who will fill it? Most people, for whom those entitlements are meant, are illiterate. Functional illiteracy in rural areas is high. Just being able to sign doesn’t make you competent to fill a form. Therefore, you are dependent on somebody who is an information agent or a *dalal* for whom filling up your form is a business proposition.

Then you have to submit papers to support your

form and deposit it. After that, you wait.... How much money is disbursed into your account, how much goes to the intermediary... it’s all a big question mark. The flow of information, its stability, its availability, is all subject to exploitation.

#### How many people get their entitlements this way?

We figured out that the time taken for oral information to convert into actual entitlements for the poor is a long journey. According to official estimates, the number of people living below the poverty line (BPL) is 270 million. But they aren’t the only ones who depend on entitlements. There are people on the poverty line, above the poverty line, too. The figure goes up to 400-500 million.

If you look at functional literacy around 34 per cent of people are illiterate. The figure for women is

40 per cent. That means this vast population is dependent on somebody to get them their entitlements. So there is a role for the information intermediary.

Unfortunately, that role is not being legitimised or professionalised. It is being played in such a way that everybody makes money in the middle. There is no going rate on who will make how much money whether it is NREGA payment, pension or school scholarship.

#### So there are intermediaries across the board?

Yes. If you look at India’s rural development budget it includes all these entitlements. These are major expenditures.

We have established community resource centres in villages equipped with computers, IT, broadband and an LCD projector in 350 locations. We realised that in 100 locations we were basically delivering entitlements and that there was space for the role of an intermediary.

So in the 350 Soochna Seva Kendras that we have set up, in 100 we put in place Soochna Sevaks. We decided to professionalise this role and that’s how the SoochnaPreneurs came into being.

#### How were they trained?

People are sitting on information, blocking it, hiding it and making it a commodity that is saleable through bribes. So you get only half of your entitlements since the rest is given as bribes.

We realised that training of the information intermediary has to be handled carefully — how they tackle people, create a database, and offer information.

You can’t charge for all the information because then you become a new digitally enabled information *dalal* or exploiter.

The cadre we built up are entrepreneurs of information across the board. They photocopy, email, get your ration card or Aadhaar card, do lamination, scanning, fill up your form, deposit it, follow up on it and use RTI if required.

#### When did you start this project?

We launched it last year and announced it publicly only recently. We are working in six backward districts — Ranchi in Jharkhand, West Champaran in Bihar, Guna in Madhya Pradesh, Tehri Garhwal in Uttarakhand, Barmer in Rajasthan and Barghar in Odisha.

Our 100 SoochnaPreneurs are mostly men and some women. The next 100 SoochnaPreneurs will be only women. We have realised that they are more accountable, responsible and they don’t migrate. They also get digitally empowered and gain respect.

#### If a woman wants to set herself up as a SoochnaPreneur how much does she need to invest?

We usually look for people who have passed Class

10 or 12. But we also look at their personality. Are they proactive, can they communicate and mobilise people, do they consider this work important, can they innovate and make money out of the facilities not available but required in that area?

We create two SoochnaPreneurs in a block as well as a physical space with a printer, lamination facility, camera and computer. The SoochnaPreneur is equipped with an Android tablet and Mera App, an app which includes all government schemes. We are gradually adding information on education, agriculture and micro-business to the app.

#### What work does the SoochnaPreneur do?

We have 2,000 government schemes in the Mera App. On an average every state has got 350 to 500 schemes. We work in six states. The app locates where you are and tells you which schemes you are entitled to.

**‘Mera App is building a database of beneficiaries. It contains details of who is availing which scheme, and how much is being disbursed in a particular area.’**

The SoochnaPreneur goes from house-to-house doing a baseline survey to find out who the beneficiaries are. So if I am a Dalit, a person from a minority community, an elder or a student, Mera App tells me which schemes match my profile. The SoochnaPreneur informs the person and registers him or her on the database.

Mera App is crowd-pulling information. Gradually this app is building a database of beneficiaries. It contains details of who is availing which scheme, and how much is being disbursed in a particular area.

Everything is priced. If it is an oral message it is priced, so is a written message. We are providing SoochnaPreneurs, the infrastructure. Their revenue in the first few months was only between ₹200 and ₹500. So we gave them a stipend of ₹1,000 for three to six months. They are now earning an average of ₹2,000 per month. Charges range from ₹5 to ₹25. They can also undertake digital literacy programmes and charge from ₹100 to 200 per person.

They undergo an orientation programme every quarter. They also have a WhatsApp group where they share problems and help each other.

We have 500,000 villages and 250,000 panchayats. There are 272 backward districts in India. That means 3,000 blocks with a million *sarpanches*. So we can scale to a million SoochnaPreneurs. Our focus is on backward districts where people suffer because of lack of information and where digital inclusion has become digital exclusion.

#### Doesn’t all this clash with the government’s Common Service Centres (CSCs)?

Its only complementing them. CSCs are concentrated more in urban areas, in towns and don’t focus entirely on entitlements but on

commercial services. They aren’t provided tablets and their training is zero. Working as an information entrepreneur in a village is an art in itself. You need to understand relationships, campaign, know how the government works. The CSCs don’t go house-to-house mapping people’s needs.

Unlike the CSCs our SoochnaPreneurs work at the village level. We also market the government’s schemes by organising information camps where we tell people what’s meant for them and what isn’t.

#### What are the entitlements that people are keen to access?

For the NREGA scheme the demand is not so much for work but payments for work done. Other schemes in demand are pension, housing, scholarships, health schemes, land records, ration cards and Aadhaar cards. We have a list of popular schemes, disbursement and the turnover.

Qualcomm funded this project to the tune of ₹2 crores in the first year and another ₹2 crores the second year. With this investment we disbursed ₹200-300 crores of entitlements.

#### With just 100 information providers. Imagine if there were millions of them.

This story is about how much money meant for the poorest of the poor is not getting into their hands because of bad systems and a piece of paper. A simple piece of information of an entitlement has to traverse at least 10 layers before it gets into the bank account of the beneficiary. The biggest hurdle is illiteracy and digital exclusion.

#### What is your response to activists who say the poor are being digitally excluded?

Going digital may be more efficient for the government. But it is excluding the poorest. Earlier the form was free. Now you pay for the photocopy and then deposit it. A poor person pays as much as ₹250 for a photocopy. He doesn’t have a choice. He needs to deposit the form with a photocopy of his Aadhaar card for one entitlement.

Photocopiers don’t exist in the village. So he has to travel 10 km to 20 km and forego his daily wage of ₹180 or so. He will pay for transport and ₹10 for the photocopy since those guys buy everything costlier. If the machine isn’t working, he loses another day’s wages.

We are now considering putting the printer in a backpack so the photocopy can be delivered at the doorstep to the beneficiary. You can’t make people suffer. If technology like this doesn’t work, if a poor person’s biometrics don’t match in your machine, you need to have an alternative. It’s a violation of human rights. ■



The women have learnt to build wells with circular steps. The quality of their work is as good as professional male well diggers

## With NREGA women learning to dig wells in Kerala like men

Shree Padre  
Kasargod

**D**IGGING a well is a job that has always been done by men. The work is not for the faint hearted. It is risky and laborious. Yet 300 women in Palakkad district's Pookkottukavu Panchayat have become expert well-diggers, going deep into the earth in search of water.

The women, who are between 35 to 70 years old, are all NREGA job card holders. They have dug 185 wells in 13 wards of the panchayat and they have in hand applications for another 300 wells.

All the wells have been dug for very poor families. Some are widows, others either aged people or economically backward families. Ninety per cent of beneficiaries belong to the Scheduled Castes. Most of them have very little land. Some of the wells were for members of this 300-women's well-digging squad.

"I didn't fear getting down into the well or climbing up. The only fear I had was that if we don't get water, people will mock us," says Ammini, 52, member of the women's well digging squad. Earlier, she worked as a daily wage labourer. Ammini has dug nine wells in the past one year with her team.

Why did so many women opt for such risky work? The reasons are — an acute shortage of water and fear of unemployment.

The panchayat has 2,568 NREGA job card holders and 1,168 applied for employment. Till last year, they were clearing wild plants by the roadside and digging the base of coconut trees to apply fertilisers and green manure. But a circular issued this year debarred them from doing work of a



K. Jayadevan

'recurring' nature. This closed all avenues for work and the job card holders were left unemployed.

One area where work existed was well digging. The panchayat doesn't have a river or a stream and suffers from an acute shortage of water. Besides, well digging was not against the recent NREGA rules.

Says panchayat president Jayadevan Kizhakkappatt, "After much thought, we proposed that the women take up well digging. At first there was a

lot of opposition. We have no history of women digging wells. It was considered impossible by almost everyone."

But this was the only option left for the NREGA workers. So, Jayadevan decided to persist. He went to the homes of some of the women and persuaded

them. "Don't pay attention to what others say. Unfortunately, our hands are tied. We can't give you any other work. I suggest you start. After a few days, if you find it very tough, we will rethink," he said.

Jayadevan's suggestion sounded reasonable to the women. But their families opposed the idea. "We will start the work. If it is difficult, we will stop," they told their families. The women parroted the advice the panchayat president had used to convince them. The families yielded half-heartedly.

On 8 August, local history was made when the first women's team, led by Ammini, started digging a well in Janaki's house in Odatt Colony at Munnurkode. Janaki and Ayyappan are an elderly couple and very poor. They had to walk 15 minutes to fetch a *koda* (water vessel) of water.

Ammini's five-member team consisted of Prema, Premakumari, Rathi and Santhakumari. People from the neighborhood taunted them saying they were snatching food from male well-diggers.

Ammini and Prema turned a deaf ear and kept motivating their team. "We faced some confusion and apprehension in the first two to three days. Slowly the work turned into a challenge. All of us worked overtime. After reaching eight *kolu* (one *kolu* is 2.5 feet), we got enough water." It took them only 35 woman days and a fortnight to dig the well. A difficult job was achieved at a far lower rate than what male well-diggers would have charged.

When the first well was successfully completed, the other women's groups got the confidence to plunge in. Within a short time, well digging spread to all 13 wards of the panchayat.

A clear process was worked out. Landowners have to bear 10 percent of the cost. They are asked to buy materials essential for well digging like a pulley, rope, ladders, wooden poles and so on. Usually a bamboo ladder with steps on both sides is used. Deeper wells require two to three such ladders that are tied to each other.

A rotating traditional pulley called *chekida* is used. The local carpenter makes it for ₹2,000. Two women can easily rotate the *chekida* to pull up a basket full of soil. The *chekida* requires far less energy than the pulley.

Lakshmi, 39, belongs to another women's team that has dug two wells. The first one was 30 feet deep and the second, 35 feet. The inner walls of the well are very neat and precisely vertical. "We kept a measuring stick for ready reference. Once in a while we checked the alignment. At that time, if any corrections were required, we would carry them out," explained Lakshmi.

Wasn't her husband Chatukutty scared? "I had my own fears. It's natural, no? But it was a question of livelihood too. Slowly I got used to her work," says Chatukutty, a driver who rents out his auto-rickshaw. "You can't say these wells were dug by inexperienced women. They have done such a neat job," he says admiringly.

According to Bindu PK, a NREGA overseer, the

diameter of the well is measured by a local parameter called *vattam*. Most families, going by the *shastras*, prefer a well with nine *vattam* or 206 cms. Occasionally, they opt for 11 *vattam*. In households where space is limited the diameter is limited to seven *vattam*. One *vattam* is 22.88 cms.

A team of six women is generally divided into three pairs. Two women go into the well and start digging. The loosened soil is filled into a rubber basket. It is pulled up by another two women with the help of a rope and the *chekida*. The soil is dispersed by the next two women. After one or two hours, the roles are reversed. This means every woman participates in all aspects of well digging.

"Not only that," says Ardra P.T., an assistant engineer with NREGA. "The women didn't stop work when they hit a stony zone. In about 30 wells, they painstakingly broke the stony layer to make the

our feat," says Jayadevan.

But sometime last December when the women completed a century — their 100th well — the panchayat decided to celebrate. They held a function and invited the MP of this area, M.B. Rajesh, as chief guest. The local media and TV reporters were also invited. Surprisingly, no one from the media turned up!

Ammini's team that had dug the first well, was destined to dig the 100th well too. The location was also close to the first well in Odatt colony. "You should see the difference," Jayadevan says with a critical glance. "The first well was a crude structure. But the ones done later are so neat no one will say it is the handiwork of non-professional women." The total amount spent so far on 180 wells is ₹35 lakhs.

Though the local press was lukewarm, the national media picked up the story. One fine day, to



Women use a chekida to lift soil



The wells are dug for families with very little money

**Each well took an average of 150 woman days and not a single woman dropped out until the job was completed.**

well deeper." Such wells require 30-40 more woman days.

"The women are paid in the unskilled labour category, that is, just ₹250 per day. Wages for a skilled male well digger in our area range from ₹700 to ₹1,000 per day," says Jayadevan.

According to him, these wells have cost, on an average, between ₹15,000 to ₹40,000 each. If male well-diggers had been employed the cost of the well would have doubled. Each well took an average of about 150 woman days. Notably, not a single woman dropped out once they started the well work.

The women have sharpened their skills by digging well after well. Many teams can dig wells which have circular steps called *pamberis*. Every 2.5 feet into the well, a *pamberi*, is made. Digging a well which has a *pamberi* requires experience and skill.

The women have been working quietly away from publicity. "We are not the type to chase the media and blow our own trumpet. From the start we have consciously remained low-key about

Jayachandran's surprise, Maneka Gandhi, Union Minister for Women and Child Development called him to congratulate the brave women of his panchayat. "People who ridiculed us in the beginning later came up to congratulate us," says Ammini.

The Pookkottukavu panchayat is very progressive. Under NREGA, 180 houses have been fitted with rooftop water harvesting systems. The panchayat now hopes to install rooftop water harvesting systems on all the wells that need it.

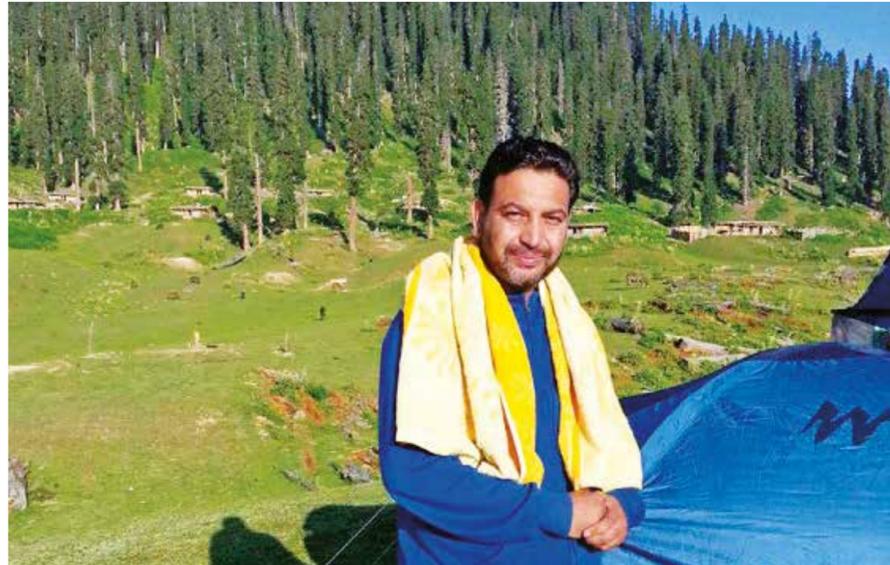
Another interesting development is that the women well-diggers are receiving requests from areas not in their panchayat to dig wells — a clear endorsement of their skills. They could probably increase their income by three or four times.

What's more women in an adjacent panchayat are now keen to learn well digging. "We are more than happy to train other women," says Jayadevan. ■

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## Peaceful agitator in Kashmir

BILAL BAHADUR



Dr Shaikh Ghulam Rasool at Tosa Maidan

**Jehangir Rashid**  
Srinagar

**A**MIDST the violence and unrest in Kashmir, Shaikh Ghulam Rasool stands apart as one of the Valley's peaceful agitators who has mobilised people to get their rights from the government.

A doctor by profession, he has played a key role in helping people empower themselves by using the Right to Information (RTI) Act in the state. He has also led the peaceful agitation to get the Army to stop using the Tosa Maidan, an expansive meadow, as a firing range.

"The RTI movement has come a long way in the Kashmir Valley. Today ordinary Kashmiris are no longer afraid to seek answers from the political establishment," says Rasool, who is a medical doctor and in that capacity, has travelled across the state extensively and spent time with people to understand their problems.

He began his practice at the Government Medical College in Srinagar and later set up a clinic in Branwar, a village in the Chadoora block of Budgam district in central Kashmir. This is where he became an RTI activist.

Says Rasool: "The village head used to call the shots in Branwar and no one was issued a ration card without his nod. Our campaign began when we succeeded in getting a ration card for one of the villagers bypassing the village head."

It was at the clinic that he met Raja Muzaffar Bhat, a founder-member of the Jammu & Kashmir Right to Information Movement (JKRTIM). Rasool eventually rose to be the movement's chairman after Bhat joined politics.

Rasool, who is also co-convenor of the National

Campaign for People's Right to Information (NCPRI) in charge of North India, says he realised in Branwar how much of a problem corruption is in villages. Local officials are corrupt and control everything, often colluding with criminal elements. The average citizen is helpless.

Tosa Maidan, which is located in the Budgam district of J&K is an example of how a community asset like a meadow goes out of the hands of people and gets misused.

**'RTI has come a long way in the Valley. Ordinary Kashmiris are no longer afraid to seek answers from the establishment.'**

The Army converted it into a firing range despite the danger to people living nearby who couldn't access it without running the risk of setting off unexploded shells. But at the same time timber smugglers had the run of the Tosa Maidan.

Rasool will also go down in history for his stellar role in freeing Tosa Maidan from the grip of this seemingly unresolvable situation.

"During my posting in 2006-2007, I used to trek to some areas of Budgam district. However, I was never allowed to trek through the Tosa Maidan range. I later discovered that timber smuggling was

rampant in this area. I talked to the timber smugglers and they said they would give up the illegal trade only if alternative means of livelihood were provided," recalls Rasool.

At the same time, during a visit to Shunglipora village he discovered that there had been innumerable deaths from the Army's unexploded shells going off later. Rasool decided to do something about it and in 2013 the Tosa Maidan Bachav Front (TMBF) was formed with him as patron.

"We sensitised people living near Tosa Maidan and roped in political parties to support our cause. Awareness programmes were held and public support began to grow. The harm the Army's firing was doing to agriculture and water sources was documented. We also filed an RTI application regarding lease of land in the meadow to the Army," says Rasool.

The peaceful people's movement and political support freed Tosa Maidan from being a firing range in 2014. Once the Army moved out the TMBF proposed that Tosa Maidan be developed as a tourist resort, but in partnership with the local community.

As medical officer under the mobile services of the Border Area Development Programme (BADP), Rasool visited Pahalgam, Tral, Kokernag, Wadwan Valley, Sinthan Top, Gurez and other villages in the Kashmir Valley.

He was in this way widely exposed to the problems of people and the shortcomings of governance in the state. He realised that the people would be better served if the state had a tough RTI law. The state had passed a law in 2004, but it was weak and since the provisions of the central law did not apply to J&K, this was a setback for activists and people seeking information.

"In 2008, a bill to amend the state RTI law was passed and the then Chief Minister, Ghulam Nabi Azad, promised to get a stronger law implemented at the earliest. However, as his government was ousted there was a temporary setback," recalls Rasool.

The JKRTIM continued its campaign and convinced political parties to include implementation of a tougher RTI Act in their election manifestoes for the 2008 Assembly elections.

Political parties like the Congress, National Conference and Communist Party of India Marxist (CPI-M) saw merit in it.

The RTI movement in Kashmir is the reason behind the expose of several scams and scandals and credited with reducing timber smuggling. This allowed the JKRTIM to move beyond its stated position and it now works on issues pertaining to the environment and tourism.

"I can say with authority that 95 percent of timber smuggling has been stopped in the Pir Panjal range of mountains. This has helped to tide over the crisis that had arisen due to deforestation in the Valley. The forest department has benefitted since their nurseries grow in a proper manner now," says Rasool. ■

## 'When you take funds someone else becomes the master'

**T.S. Sudhir**  
Chennai

**T**HREE years ago A. Narayanan founded Change India to fight for issues close to his heart. When he is not a social activist, which is rare, he wears the hat of a businessman handling manufacturing operations of scientific instruments for research. A native of Tirunelveli, Narayanan has been in Chennai since 1978. Over the past many years, he has been in the frontlines of campaigns against manual scavenging, liquor consumption, political corruption and juvenile care. He is a permanent fixture in Chennai's courts ensuring justice is delivered to those deprived of basic rights.

T.S. Sudhir spoke to Narayanan about the many facets of his work.

**You are a person with a background in science, but involved in social issues. How does that work?**

I am a scientifically tempered person. I am in the business of science which helps me look at issues in an analytical manner. But I keep my business small so that I am able to devote more time to my NGO which takes up most of my time and energy.

**You spend a lot of time inside law courts...**

Yes, but I don't always take the public interest litigation route. I do a lot of advocacy and activism work outside the court, but court issues get more attention.

**One of the issues you have been passionately fighting for is a ban on manual scavenging. Would you say the situation today is far better than what it was when you started talking about it?**

Yes. Bezwada Wilson (of Safai Karmachari Union) focused on the rural areas while I, being in an urban centre, focused on towns and cities. We managed to bring about a change in mindsets and get the act (Prohibition of Employment as Manual Scavengers and their Rehabilitation Act 2013) passed in Parliament.

**And that has been a huge step forward...**

Yes, sometime in 2006-07, I was witness to the manner in which recruitment for manual scavengers was taking place inside the Chennai Metro Works, the department in charge of water supply and sewerage in the city. These unclean operations were outsourced to contractors and they would employ youth but the principal employer was the state government of Tamil Nadu.

What I witnessed in the presence of government officials was shocking. The candidates came attired in their underwear or loincloth. After consuming liquor they tied a rope to their waist and descended into the raw sewage. You needed to be drunk to be

able to withstand that stink. The official had a timer and the candidate had to be under the sewage for a fixed period. It was criminal.

**But even today this is pretty much what happens in many cities of India. Not many municipal corporations have invested in machines.**

It has been reduced to a large extent in Tamil Nadu. A lot of machines have been procured and a special



A. Narayanan

committee was also formed by the court to monitor implementation.

**Another area where you have done commendable work is in the field of juvenile justice.**

That is an ongoing process. For instance, a CBI probe is underway into a case we busted two years back in Usilimpatti, an area notorious for female foeticide. In another case, new born females were being smuggled away by a Christian group. One hundred and twenty-five newborn babies had been taken away and we managed to stop 89 of them. The pastor escaped to Germany. The nurse had been bribed with Rs 500 per infant. It was a traumatising experience for me because when children are involved, you feel an emotional connect.

**And when you take on powerful groups, they also accuse you of bias.**

Oh yes, it happens. In one case I was accused of

having a Hindutva agenda. But when I exposed tribal children being brought from the northeast by right-wing Hindu groups to Hosur, I was accused of working for Christian groups and being anti-Hindu. Again when I took on the Christian child care institutions in Kanyakumari, which despite being the second smallest district in Tamil Nadu has a large number of these institutions, I was accused of having a Hindutva agenda.

**So you get it from both sides.**

Even from the judiciary. When I was fighting a case in 2006 in the Madras High Court against the concept of pay wards at the general hospital, instead of allocating resources for poor patients, the judge accused me of having vested interests since I am also into the business of scientific instruments.

**Tamil Nadu has been in the midst of a debate over prohibition. The government shut down 1,000 TASMALC liquor shops in the last year while opposition parties want total prohibition. What's your take on this?**

The Supreme Court has now banned liquor consumption on highways. But if you go on the East Coast Road out of Chennai, you will find an underground mafia making money. Unscrupulous cops are making money because the tourism industry there needs it. If you ban, only anti-social elements make money. We need more de-addiction centres, a focus on road safety, an integrated policy and a scientific approach to problems of alcoholism.

**You dabbled in the world of journalism and publishing as well. Was it a worthwhile experience?**

Yes, I had a publication called *Paadam*. I was the editor and publisher. It was a development journal in Tamil on the lines of *Economic and Political Weekly* (EPW).

I ran it from 2008 to 2014. It was a hit initially with magazines like *Ananda Vikatan* borrowing stories from us to flesh them out further. But with the reading habit on the wane, I had to shut it down three years ago.

**Most NGOs get into a spot of bother over the source of their funds. How does 'Change India' manage this?**

We do not take any money from anywhere. Our Trust funds us internally. But I take a lot of help from friends. For instance, many of my lawyer friends fight our cases pro bono. But we have to pay lawyers at the Supreme Court. I fight many cases myself and enlist the help of interns from law colleges for documentation. When you take funds, you usually start well but then someone else becomes the master. ■

## Small victory for vendors

Civil Society News  
New Delhi

**T**HOUSANDS of street vendors in Delhi protested on 8 August demanding that the city authorities stop evicting them and instead implement the Street Vendors (Protection of Livelihood and Regulation of Street Vending) Act 2014, which gives them the right to ply their small enterprises.

The three municipalities, the police and the Delhi government have been evicting street vendors from markets using some pretext or the other. This time, under the guise of freeing up public spaces from encroachments, the civic authorities removed vendors in 60 markets 'in a most planned, arbitrary and barbaric way,' says Arbind Singh, founder and head of National Association of Street Vendors of India (NASVI).

The protests and NASVI's efforts have had some immediate impact and resulted in a few small victories for the vendors. The commissioners of two municipalities have agreed to the drawing up of lists of vendors with their Aadhar card numbers. They have promised that these vendors will not be evicted.

The municipalities have also agreed to issue a receipt to vendors when their goods are seized during an eviction drive. "The inspectors confiscate the goods of the vendors and sell them. Or they make fun of the vendors and distribute his goods to the public. It is a very feudal system. The municipal commissioners did not know this was happening," says Singh.

Issuing a receipt will help the vendor get his goods back. "It is a semi-pucca system," says Singh.

"But at least this ensures some accountability."

However, the situation in Delhi is a complex one despite the vendors having a strong central law in their favour. It remains to be seen whether the authorities will implement what they have promised.

The law disallows arbitrary eviction or even relocation of vendors. According to the law, Town Vending Committees (TVCs) consisting of

law hadn't been notified.

Along came the Aam Aadmi Party (AAP) government and nullified these TVCs. Instead it ordered every four wards in the city to have one TVC each. As a result, as many as 72 TVCs were formed. The street vendors law is now stuck in a logjam since it is not possible for so many TVCs to function. Besides, the TVCs have been filled with members who don't understand the issues, points out Singh.

With the TVCs dysfunctional, the municipalities find it easy to evict vendors every now and then. The vendors protest, the municipalities back down and the vendors return to their spots. For a while there is peace before another round of evict-and-revert begins. "We are tired of this hide and seek game," says Singh.

The municipalities blame AAP and AAP blames the Lieutenant-Governor of Delhi, Anil Bajjal. NASVI met the L-G and found out no eviction orders had been issued. "First of all we are not encroachers," said Singh. "Secondly, please define what is an encroacher."

Vendors are demanding that the street vendors law be implemented in its true spirit and five TVCs be set up. "Each TVC needs leadership. Vendors need to be trained so that they can speak up for their colleagues," says Singh. It is not possible to do that with a mob of 72 TVCs.

Delhi has 450,000 vendors who are getting tired of constant harassment. Instead of paying bribes to the police and municipality inspectors — sometimes as much as ₹800 per day — vendors would be happier adding to the cash-strapped municipality's coffers by paying a proper tax or licence fee.

"For the moment we are telling city authorities to just leave us alone. Let the present status continue," says Singh in exasperation. ■

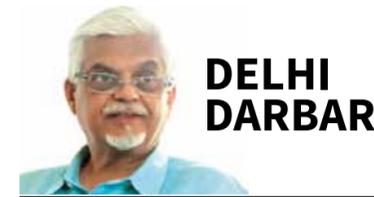


Arbind Singh with protesting vendors outside the Civic Centre

representatives from resident welfare associations, market associations, police, land owning authorities and street vendor associations headed by the municipal commissioner, are to be set up. The TVCs are supposed to first carry out a survey, identify vending zones and issue licences to genuine street vendors.

The previous Congress government had set up five TVCs — three for the three municipal corporations, one for the NDMC area and one for the cantonment area. These had begun work and were functioning well enough though rules for the

## India needs a 'Learn East' policy



SANJAYA BARU

This is Sanjaya Baru's farewell column. He joins FICCI as Secretary-General.

**A**S India celebrates 70 years of freedom from colonial rule it is sobering to recall that in the span of these seven decades several Asian nations that looked up to India at its birth are today looking behind, watching a trailing India trying to catch up. With the exception of a few laggards mainly in South Asia most other Asian nations have performed better than India on most development indicators. Nowhere is this contrast sharper than in East and Southeast Asia.

The single most important differentiator that sets India apart from most other Asian nations is literacy and the level of overall education. In higher education India is perhaps ahead of many Asian nations, but when it comes to basic education and the imparting of skills India has lagged woefully behind. This is not news but a fact that hits one in the face as one travels around Asia.

Western development economics popularised the idea that East and Southeast Asia had done better than India because of the latter's inward-oriented policy of import-substituting industrialisation as opposed to the former's outward-oriented policy of export-led growth. This was not the real story, as economists at the World Bank too had finally confessed when they chose to study the "East Asian Miracle", as it came to be called by development economists.

The East and Southeast Asian development story is a complex story of considerable diversity in policy and practice. The bottom line, as I have already said, has been the universal spread of education. Almost all member-nations of the Association of Southeast Asian Nations (ASEAN) have literacy rates upwards of 90 per cent, with only Cambodia and Laos having rates below that. As for East Asia, including China, Japan, Korea and Taiwan, their rates are close to a hundred per cent. India's average literacy rate has slowly climbed up these past two decades from below 50 per cent a quarter century ago to around 75 per cent (with Kerala and Tamil Nadu at the top and Bihar at the bottom).

More than literacy it is the spread of employable skills that has made all the difference between development and backwardness in Asia. India recognised this more than a decade ago when it launched a skill development mission. It is a mission that requires pursuit with redoubled energy at a time when the spectre of youth unemployment is beginning to haunt India again.

Here too there is much to learn from Southeast Asia. Consider just the example of tourism — a high employment generating sector. Southeast Asia attracts over a 100 million tourists from around the world every year compared to the less than eight million that come to India. India can be an equally attractive destination for international tourism provided we approach the agenda of tourism promotion as a national development mission. This requires a skilled workforce trained to deal with tourists from across the world and across India. Clearly basic education would be the starting point.



The Borobudur Temple in Indonesia

The next step would be to create necessary domestic infrastructure — both the software and hardware — that makes travel and tourism convenient, secure and relaxing. Finally, India needs a visa policy that makes the idea of visiting the country less daunting.

To be sure there has been progress on all fronts. But the gap between India and ASEAN in tourism remains wide. Forget advanced and well-organised Singapore. Even less developed member-nations of ASEAN are so easy to travel to. More importantly, both places of religious importance and holiday destinations are all very well connected and maintained. Easy to access. Easy to stay in. Easy to handle. Most importantly, both government authorities and private businesses have become extremely tourist friendly.

For me, at a personal level, two recent experiences in India and in Indonesia demonstrated the enormous economic potential of tourism and the gap between potential and performance in India. In the past few months I visited two important

Buddhist sites in India and Indonesia — the cave temples of Ajanta and Ellora in the state of Maharashtra in India and the Buddhist Stupa at Borobudur, near Yogyakarta in Indonesia.

To get to the famous Ajanta caves, among the most important ancient heritage sites in India with the potential to attract far more tourists than the Taj Mahal, one has to travel to a poorly connected Aurangabad town in Maharashtra. Stay at mediocre hotels in the town, after having arrived at a shabby railway station or a tacky airport. Travel on badly maintained roads to Ajanta either on rickety public transport or in expensive private vehicles. The entire experience of entry into and moving around is far from inspiring. The caves have been reasonably well maintained (I visited them two decades ago and again recently) but the overall experience is not awe-inspiring. Not much is done to educate the average visitor as to the significance of the place, perhaps on the assumption that only those who know come.

In sharp contrast, Borobudur is well connected to the world through the city of Yogyakarta (Jogjakarta) in Indonesia. Foreign tourists are warmly welcomed at the point of entry. For an Indian visitor who is used to harassment by and the officiousness of immigration officials in the West and at home, Yogyakarta's welcoming official who assures you that no visa is required if one is an Indian, offers a comforting contrast. More to the point, Muslim Indonesia has preserved this great site of Buddhism better than the Land of the Buddha has its own Buddhist sites. Borobudur is a beautiful garden of peace.

The thought that remained with me is how much employment — direct and indirect — Borobudur was generating for the people of Indonesia compared to the employment being generated by the Ajanta caves for the people of India. Tourism is a tremendous employment generator if adequate investment is made in the infrastructure of tourism. The starting point has to be in the field of education.

Twenty-five years ago Prime Minister P.V. Narasimha Rao launched a "Look East" policy asking India to divert its attention away from the world to its West and 'Look East' to explore and learn from Asia. More recently, renewing Narasimha Rao's call, Prime Minister Narendra Modi has urged India not to just 'Look East' but to in fact "Act East", and build the required economic and strategic links. However, it is perhaps useful to also add that while looking and acting East, India must "Learn" from the East. The most important lesson for India to learn, even at 70, is the need to educate its people and create the software of a modern, efficient society. ■

### Samita's World

by SAMITA RATHOR





Victor Hugo Gomes at the internationally renowned Goa Chitra Museum

## 3 museums on the ordinary citizen

Derek Almeida  
Panjim

ABOUT a year ago a Russian girl made a frantic call to Victor Hugo Gomes, curator and founder of the internationally renowned Goa Chitra Museum. The architect in whose house she had rented a room had passed away and the family was going to put his collection of books to the torch. Victor acquired the collection. Among the many books was a diary dating back to 1861 and a mysterious woman named Isabella Michael.

Why did that Russian girl think of Victor Hugo Gomes?

Two years ago the temple committee of the Shree Bugga Sangameswara Swamy Temple in Guntakal, Andhra Pradesh got in touch with Victor. A rath belonging to the temple was on the verge of destruction and they desperately needed someone to preserve it. The rath was eventually sold to Goa Chitra Museum and it now stands at the entrance, totally restored, granite wheels and all.

Why did the temple committee think of Victor Hugo Gomes?

Because single-handedly he has set up three museums in a span of seven years — Goa Chitra, Goa Chakra and Goa Cruti. The museums aren't about kings and rulers or about famous men and women but about the common man. There are

saxophones, clay apparatus for distilling *feni*, surgical implements, ploughs, cameras, walking sticks, colonial furniture and the original plaques from the casket of St Francis Xavier. The common theme is the ordinary man.

"If you have noticed, the artifacts and the museum are not guided by aesthetics, but by utility," says Gomes. "Everything here has utility value and was used by common people over the years."

When Goa Chitra was inaugurated in 2009, the ceremonial lamp was lit by six traditional professionals: a toddy tapper, a farmer, a basket weaver, a fisherman, a coconut plucker and a potter. Nothing symbolises the guiding principle behind the museums more than this simple ceremony which was bereft of VIPs and politicians.

"I want to preserve everything," says Gomes, but this is clearly not possible. For every three artifacts that arrive at the museum either as a donation or paid for, 10 more leave the state through a network of artifact dealers.

Goa's unique 450-year colonial past has made it a treasure trove of artifacts and many of them leave the country without a trace. Says Gomes: "When I went to remote areas of Goa they told me that people came in big vehicles and took whatever they had at that time. No one knows where those things have gone. When I was collecting musical instruments I was told about a priest who collected

these instruments from areas where he was posted and no one knows where they went. Then there was a lady who sent a letter to the church saying that she was setting up a museum. The artifacts collected by her have disappeared. There is a gentleman from Portugal who comes to Goa every year and takes back Goan objects."

Over the years Gomes has maintained close links with antique dealers and the standing instruction to them is that he must be given the first right of refusal. "Every day I receive WhatsApp messages about artifacts for sale. The good thing is that these dealers inform me, but the prices quoted by them are not affordable."

One message reads: "Portuguese *handi* for sale, two pieces." Another one goes like this: "Sir my name is Atish (name changed) from Mapusa. I deal in antiques. I saw your museum on Google. Do you buy antique things?" Victor replies: "Send me pictures of anything interesting you have." What follows is a series of pictures of crockery and religious items.

Gomes has tried warning antique dealers about possible action by the government, but this only resulted in dealers melting silver and gold objects and the silver thread on church vestments.

"When you sell an artifact to a foreigner or an outsider who did not grow with these things, it destroys the narrative and the story. I have been to one place where a church confessional was used as a bar," laments Gomes who has laboured for over three decades to gather, restore and preserve nearly 40,000 artifacts.

One of Gomes' latest acquisitions is five boxes of neatly arranged tiny cards with summaries of important court judgments, some of them dating back to 1910. These slices of history were sold as scrap when the courts were being renovated or shifted in Goa.

A similar episode occurred in 2004 when the

buildings that housed one of the oldest medical colleges in Asia were torn down and renovated to make way for the first International Film Festival of India. Gomes, again through scrap dealers, managed to get hold of the photos of the first directors of the college and hospital which was founded in 1842.

The three museums are not just a collection of artifacts, but a treasure trove of stories and Gomes is perhaps the only one who knows all of them. He relates them with the excitement and zest that few of his contemporaries can match.

The first museum, Goa Chitra, is a collection of agricultural implements and trade tools used in ancient Goa and is set up against the background of an organic farm.

The second museum, Goa Chakra, is a unique collection of carriages from all over India and the third, Goa Cruti, is dedicated to Goa's colonial past and native craftsmanship. Surprisingly, Goa Cruti is dedicated to the late Jaswant Singh, who for 16 years, helped restore and preserve artifacts at the museum. All three museums boast of

a collection of 40,000 items.

Gomes' tryst with Goa began in 1992 when he gave up a scholarship at the Lucknow College of Arts and Crafts to set up the Christian Art Museum at the Rachol Seminary in Goa. Differences with top administrators forced him to leave after which he dabbled in advertising, restoration of old houses and even set up a restaurant, but he never stopped collecting artifacts.

His success lies not only in setting up three museums, but creating a unique revenue model to sustain and grow them.

Leaning on his love for music, Victor started holding music concerts at the museum with membership fees.

The museum also offers paid internships to students from all over the world and this was possible because Goa Chitra is now on the world map. Gomes has participated at international workshops, and was selected as a resource person for UNESCO-based programmes. He was appointed by the British Deputy High Commission to map museums in Western India.

Goa Chitra has tied up for an 18-credit semester programme with Carleton University, Minnesota, and is affiliated with the University of Bologna, Italy.

In 2009, Gomes was invited to exhibit at the University Institute of Lisbon (ISCTE), Portugal, where he presented a part of Goa Chitra's collection on costumes and jewelry of Goa's indigenous tribe, the Gavadas.

That brings us back to the mystery of Isabella Michael. Who was she and to whom was she writing love letters? Why did she write in English and not Portuguese which was widely used in Goa? The only clue is a mention of Calcutta and a picture of four gentlemen, presumably British, dressed in polo uniform. The rest of the story is for Victor Hugo Gomes to unearth. ■



Antique clocks and furniture



A set of old musical instruments



Goa Chakra is a unique collection of carriages from all over India

## Frozen jack has come to Delhi

Shree Padre  
Bengaluru

JACKFRUIT is all set to conquer the north Indian market with Mother Dairy launching frozen jackfruit, with a shelf life of one year, in 250 Safal outlets in Delhi and the National Capital Region.

A 300 gm packet is priced at ₹40. Jackfruit is being sourced from Jharkhand and processed in Mother Dairy's Ranchi unit.

In recent years, demand for jackfruit has spiralled in north India. Kerala supplies truckloads of tender jackfruit to the north, nine months in a year. In the peak season, the demand touches about 700 tonnes per day.

Unfortunately, raw tender jackfruit is sold in dusty and unhygienic markets. It is cut and kept in the open with flies buzzing around. Jackfruit, in this condition, repels health conscious consumers. Those who buy the whole jackfruit find cutting and peeling it to be time consuming and cumbersome because latex from the fruit makes it sticky.

Safal's frozen jackfruit solves all these problems. It has to be simply thawed and cooked. Safal's current production is 100 tonnes. Based on the response, production will be scaled up next season.

"Jackfruit is a delicacy loved by everyone in the north. So far it was available fresh only for six or seven months while in season. It is a super food with dietary fibre, vitamins, minerals and moreover it is organic. We are bringing this poor man's fruit to the rich man's kitchen round the year," says Pradipta Kumar Sahoo, business head of Safal, the horticulture arm of Mother Dairy.

Sahoo points out that jackfruit is a healthier and cheaper option than *mutter-paneer* and *alu-gobi*, two staple vegetable dishes in the north.

"Gobi is not grown organically and costs ₹250 per kg during the monsoon months. Paneer is ₹350 per kg and peas are around ₹160 a kg. Frozen jackfruit costs just ₹100 per kg," says Sahoo.

India produces two million tonnes of jackfruit every year. Karnataka, Kerala, Tripura, Meghalaya, Odisha and Jharkhand are the main jackfruit growing states. Unfortunately, according to rough estimates, 70 percent of jackfruit isn't consumed. Jharkhand is one state where wastage is pretty high.

Apart from Ranchi, Safal has processing plants in Delhi, Bengaluru and Ramgarh in Jharkhand. It hopes to generate a revenue of ₹10 to 12 crore from jackfruit in the first year itself. The cooperative intends to scale up production to 1,000 tonnes per annum when it launches frozen jackfruit across India.



Pradipta Kumar Sahoo with a packet of frozen jackfruit

In the north jackfruit is dunked into curry. It is also regarded as a substitute for meat. "It is liked by vegetarians and those who are fed up with non-veg," says Sahoo.

Frozen jackfruit in a ready-to-cook form is slated to do as well as Mother Dairy's frozen peas. "Frozen is fresher than fresh jackfruit," says Sahoo. "By the time you cut vegetables they are already a few days old. But we freeze jackfruit immediately after harvesting so there is no loss of nutrients."

This isn't Safal's first foray into the jackfruit market. Since the past few years it has been selling peeled and cut jackfruit in 200 gm packets priced at ₹20 through its outlets. About 500 kg was sold every day. The jackfruit was bought from Azadpur Mandi, Delhi's biggest fruit and vegetable market during season.

Why has Safal invested in jackfruit? "We have pioneered frozen vegetable marketing. Mother Dairy procures 2.5 lakh tonnes of fruits and vegetables annually from 16 states from some 10,000 farmers. We have 12 plants run by third parties who process for us in Uttarakhand, Andhra Pradesh, Maharashtra, Punjab and Tamil Nadu. The company also exports fruits and vegetables to more than 35 countries. How can we call ourselves a market leader if we don't realise the potential of a vegetable or fruit and market it?" asks Sahoo.

"We started marketing frozen green peas in 1991 for the first time. Today we sell frozen green peas worth ₹800 crores — about 100,000 tonnes — every year. The frozen pea market is growing at the rate of 16 percent by volume every year."

Mother Dairy plants which freeze peas run only from December to April. The plants are now being deployed to freeze jackfruit for two to three months after April. By utilising the present capacity of the plants, production costs will be reduced.

Mother Dairy's latest venture has huge implications for jackfruit farmers. It will boost demand for frozen jackfruit and prompt smaller players to enter this market with similar products. Frozen jackfruit will attract buyers in Western countries as well.

But there are hurdles. Peeling jackfruit is a challenging task. Currently, it is being done manually and needs a lot of labour. A substantial percentage of jackfruit is wasted in peeling and its core is removed. "If these processes can be mechanised, it will bring down costs and enable us to pay more to the farmer. We can also offer the product to the consumer at a

lower price," says Sahoo.

After New Delhi, the biggest market for frozen vegetables for Safal is Bengaluru. If Delhi responds well, Mother Dairy will begin selling frozen jackfruit in Bengaluru too.

Sahoo hails from Odisha. He expresses concern about the massive wastage of this wonder food and is all praise for its sustainability. "It doesn't deplete the soil and gives a whopping quantity of crop. With a good supply chain and promotion, it will be well received in the market," he predicts.

Safal has already started a campaign to popularise frozen jackfruit. Some elements of the campaign are — briefing consumers at Safal outlets, newspaper advertisements, radio jingles and blind tasting.

Safal has also done a market survey on the acceptability of frozen jackfruit and the response was positive. Housewives in the NCR region appreciated the fact that they didn't have to clean or peel jackfruit — 52 percent of respondents were happy that the product didn't stick to their hands.

Frozen jackfruit is all slated to do as well as its precursor, frozen peas. "It took frozen green peas two decades to achieve its present growth. We are hopeful jackfruit will achieve the same growth in just five years if all goes well," says Sahoo. ■

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In India Self-Help Groups, artisans and crafts people are producing goods that are natural, artistic and eco-friendly. Inventors of useful technologies are resolving issues being faced in our cities and villages. Here are a range of products that caught our attention this year.

### SINGING BOWLS

FOR several decades Amal Kumar Sahu's family have been manufacturing a range of intricate metal products. But his meditation bowls with handles are perhaps his most unique product. Move the handle across the rim of the bowl and it emits a melodious humming sound. Touch the metal as the bowl rotates and the vibration you feel on your fingers is electric.

The meditation bowl, also called the singing bowl, is believed to induce a deep meditative, peaceful state and clarity of mind. The sound vibrations from a singing bowl affect the nervous system, relax the mind and inhibit pain, it is said. Singing bowls are used by Buddhists and by yoga followers globally to meditate.

Sahu's bowls are made with bronze. Smooth and perfectly crafted the bowls are handmade. The singing bowls are Sahu's specialty and earn his family a decent income. He doesn't recall how his family acquired this skill but points out that Odisha is an important centre of Buddhism.

It was here that the great Mauryan king Ashoka fought the battle of Kalinga in 262 BC. The sheer brutality of war deeply distressed Ashoka. He embraced Buddhism and became a compassionate apostle of peace. The rest is history. ■

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### STITCHES OF LOVE

DEVOTION is an apt name for a shop that sells products lovingly made by rural women in Haryana. You can buy bedsheets, towels, curtains and table linen for your home, beautifully hand embroidered and neatly stitched. For babies there are frocks, quilts, sweaters and more, all soft and cuddly. For women there are attractive kurtas, nightwear and saris with stylish embroidery and patterns.

Devotion is a unit of the Arpana Trust which works to improve health, education and the livelihood of marginalised people in Haryana, Himachal Pradesh and Delhi's slums. Over 2,000 women have been organised into Self-Help Groups (SHG), trained and linked to banks. Arpana markets their products and Devotion provides a steady source of income to thousands of families.

Arpana runs a multispecialty hospital in Karnal. In Molarbund slum of Delhi, a team of Delhi's best doctors provide healthcare at its clinic. Arpana is committed to providing selfless service to all, as propagated by its founder and inspiration, Param Pujya Ma. ■

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## ALL THAT GLITTERS

A small group of women in west Delhi are making wonderful jewellery and jewellery boxes with clay, glitter, paint and a touch of imagination.

"The boxes are as exquisite as the jewelry they contain. And each box is an individual work of art," says Patricia Montalto, the inspiration behind this feisty venture.

It all started when Montalto, a writer, volunteered at the Development Research and Action Group (DRAG), an NGO founded by Gautam Vohra.

DRAG runs a school, the DRAG Vikas Kendra, for marginalised children and a vocational centre for poorer women that offers courses in tailoring, computer skills, English and maths.

Montalto began working at the women's centre four years ago. She noticed that the women would crowd around her when she wore attractive jewellery. They wanted to learn to make jewellery, they said. So Montalto bought 60 kg of clay. "Enough to build a house," laughed the women and their manufacturing unit got going. "I showed them the jewelry that others had made from clay on the Internet to indicate the type of items they could produce," says Montalto. Paint, glitter, varnish and more were added as bangles, pendants and earrings tumbled out.



The boxes were inspired by fashion magazines. Montalto's small team holds exhibitions to sell their jewellery in Delhi. ■

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## NATURAL HUB

TWO years ago, Ankur Grover and Harleen Verma started All Naturals to market natural products at reasonable prices. It all began when they stumbled upon Holy Lama Naturals while holidaying in Kathmandu. Struck by the purity of Holy Lama products and intrigued by the name, they set out to find out more. They discovered that Holy Lama was based in Kerala and that it was run by women.

All Naturals now represents Holy Lama in Delhi and helps other micro enterprises producing natural products get a foothold in the north Indian market.

Their stall at Dastkar's annual Nature Bazaar sold wonderful spice drops — cinnamon, nutmeg, vanilla, tea masala along with personal care products like handmade soaps, shower gels, bath salts and hair oils. They also had natural agarbattis, teas and air fresheners with no trace of chemicals.

The enterprising couple has started their own manufacturing unit. They make around 70 essential oils for hair, skin, joint pain, nasal congestion and more. Some of the oils are exotic: like amber and pink lotus and Helichrysum which soothes burns.

Prices are remarkably reasonable and vary from ₹250 to ₹400. "We seriously believe that everyone should be able to afford natural products," says Ankur with sincerity. ■

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## BASKET BLEND



THE baskets at Om Prakash's stall catch the eye. Neatly piled, they are a riot of colours: blue, green, red, orange or a happy blend of many shades. He sells baskets of all shapes and sizes for every need. There are wastepaper baskets, boxes, trays, and more.

Om Prakash says for many years he was making ordinary tokris and selling them in Varanasi's bazaars. People would buy them for storing foods like grains and during weddings. But, then, plastic bins replaced his tokris.

Om Prakash was at a loss. His father, Ranji Bhand, had won a national award for weaving. He put his son in touch with the Dastkari Haat Samiti. "They sent me for training. I learnt how to make designer baskets," says Om Prakash.

The baskets are made from two grasses — moonj and khus. "I collect these grasses every October," he says. "Then I give them to women in villages near Bhadohi. They weave them into baskets during their spare time." He then dyes the baskets and sells them.

Not only does Om Prakash earn enough for his family, his tiny business provides an income of about ₹2,000 to ₹3,000 to 360 village women, he says with considerable pride. ■

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## DESI CHOCOLATE



BITE into a treasure trove of chocolates produced by Campco (Central Arecanut and Cocoa Marketing and Processing Cooperative), which runs the only chocolate factory in India that buys its cocoa beans directly from 15,000 farmers in Andhra Pradesh, Karnataka and Kerala.

Campco makes 14 types of chocolates in its state-of-the-art factory in Puttur in Karnataka. There is white chocolate, milk chocolate, dark chocolate, chocolate with a biscuit layer, éclairs and drinking chocolate. You can also buy large bars of chocolate for melting into desserts. Prices are very reasonable.

Campco's recent innovation is Kalpa, a dark chocolate made with palm sugar. Kalpa is rich in potassium, magnesium, iron and Vitamin E, B and C. Chocolate fused with palm sugar yields an intense chocolate taste that's pleasantly addictive.

Campco was set up in July 1973 by Varanashi Subraya Bhat after the prices of arecanut crashed between 1970 and 1973 and farmers found themselves in deep distress. Bhat came to their rescue. He mobilised farmers and set up Campco.

In the 1980s arecanut farmers were again in a spot. They grew cocoa as an inter crop but during the peak buying season the multinational company that always bought their beans backed out because of a slump in international prices. Campco stepped in and bought the cocoa beans and subsequently set up the chocolate factory. ■

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## BOVINE BOUNTY

COWS are a common sight in every Indian city. Left to fend for themselves they forage garbage for food. Often cows end up dying a painful death by swallowing plastic bags. Illegal dairy owners in urban areas confine cattle in a pitiable state.

Holy Cow Foundation helps such hapless cows. Founded by Anuradha Modi, an avid animal lover and KK Modi, an industrialist, Holy Cow manufactures and markets cow products and provides consultancies in setting up scientifically managed cow shelters. It encourages people to be kind to animals and sponsor at least one cow.

Holy Cow's gamut of products now includes a floor cleaner, shampoo, natural mosquito coil and Chyawanprash, a mix of herbs that is said to build immunity. The floor cleaner includes neem. It spruces up your home and makes it smell good. Holy Cow is famous for the purity of its ghee. Cow's ghee is much in demand as a 'super food' with medicinal qualities. Other products include joint pain oil, incense sticks, body scrub, toothpaste and manure. All profits are ploughed back to serving cows. ■



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## DHOKRA REDUX

TRADITIONAL dhokra metal art has been given a new twist by young craftsman Shoubhik Daw. He has combined it with wood and then designed a range of products — serving trays, towel holders, napkin holders and salad spoons. There's also dhokra jewellery.

Daw is from Santiniketan. A traditional dhokra craftsman, he says the idea struck him while visiting upper class homes. He experimented and then set up a workshop which now employs seven people: three women and four men. So his business is a source of income for seven families, he says.

Dhokra is one of the oldest metal crafts in the world, dating back to the Indus Valley Civilisation. It has survived because of the delicate artifacts crafts persons make with it and because it has been constantly updated. Daw uses akashmoni wood (acacia auriculiformis). It has a smooth feel and looks pretty with dhokra artwork.

The monsoon is a lean season for Daw because dhokra needs sunshine to dry. He says many tourists who visit Santiniketan buy from him. Like most craftspersons he relies on exhibitions too. But the idea of having his own e-commerce site doesn't interest him. "My business is very small. I would need to invest in a whole lot of infrastructure to do that," he says. ■



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## ▼ MADHUBANI TO ORDER

STANDING against a backdrop of his paintings, Santosh Kumar Paswan says he is at the exhibition of Geographical Indicator products at Dilli Haat thanks to a lucky draw. A Madhubani artist, he was one of four painters who won a prized stall.

Like most Madhubani artists, Paswan comes from a family of painters. He didn't have to go to an art college. His mother has won a national award for her skills.

Paswan's main clients are the middle class whom he meets at exhibitions. "I have adjusted my paintings to suit the décor of their homes," he says. "I find that people in cities prefer paintings of trees, birds and fish which represent good luck. Images from the Ramayana and Mahabharata continue to be popular."

Paswan also does customised paintings for which he charges a little extra. It takes him a week to paint and frame his work. He can paint a wall in your home or office for which he charges around ₹1,000 per square foot.

He says the government has been very supportive. There is a service centre and a marketing centre for artists in Madhubani. Loans, at low interest, are readily available. The government also organises regular exhibitions for Madhubani artists. ■



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## ▼ WATER ON WHEELS



RURAL women walk miles in India with pots on their heads to fetch water. There probably isn't a single state in the country that has a tap in every home. In the midst of summer, when temperatures touch over 45°Celsius, women still make this arduous journey in search of water. Carrying multiple pots of water is physically exhausting and tells on the health of women.

Habitat for Humanity India is easing the burden on rural women in Maharashtra by providing them an inventive Water Wheel. It is a cylindrical drum made of safe food-grade high-density polyethylene.

The Water Wheel can hold 45 litres of water, three to five time more than what women, on an average, carry on their heads. The wheel is equipped with a plastic or metal handle to make it easy to roll on the ground.

All the women who received the Water Wheel say it has made their lives much easier. Lakshmi Bai Neel of Porgaon village in Aurangabad says she can carry more water per trip and, what's more, even her husband and children share the burden.

In Nagewadi village in Karjat, women used to make several trips to wells and the Pathraj river to fetch water. The Water Wheel, says Nana Raghu Bhangare, a student of Konkan College, enables her to go to college without feeling exhausted.

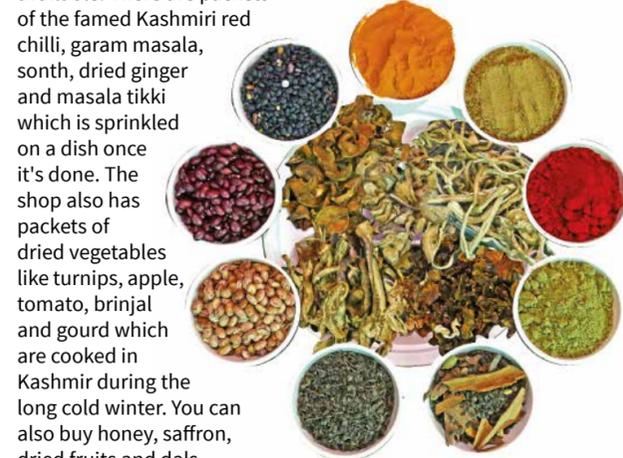
"Carrying heavy vessels filled with water was cumbersome and tiring. Habitat for Humanity India's Water Wheels are saving us energy and time. We are also able to carry more water," says Jaya Raghav Padhir of Karjat.

Habitat for Humanity India has provided over 3,400 Water Wheels in Aurangabad, Latur, Nanded, Osmanabad and Karjat regions of Maharashtra. The intervention has impacted the lives of nearly 3,442 families. ■

Contact: Habitat for Humanity India, 102/103, 1st Floor, Dhantak Plaza, Makwana Road, Marol, Andheri (East), Mumbai - 400 059; Tel: 91-22-2920 9851/52; Fax: 91-22- 2920 9854; Website: www.habitatindia.in

## ▼ SPICE OF KASHMIR

SHEHJAR Spices is a tiny shop in Kashmiri Haat, a small market in Delhi run by Kashmiri Pandits displaced from the Valley. You can find all the spices, herbs and condiments that go into making an authentic Kashmiri meal in this shop. Three types of kahwa are available. There are packets of the famed Kashmiri red chilli, garam masala, sonth, dried ginger and masala tikki which is sprinkled on a dish once it's done. The shop also has packets of dried vegetables like turnips, apple, tomato, brinjal and gourd which are cooked in Kashmir during the long cold winter. You can also buy honey, saffron, dried fruits and dals.



If you don't know how to cook Kashmiri food this is a good place to ask. The shop stocks books on Kashmiri cuisine, with recipes written in an easy style. Siddharth Kaul, who owns Shehjar Spices, says most of his clients are local Kashmiris but caterers and restaurant chefs turn up too. He does home delivery as well.

Kashmiri Haat is lined with shops selling shawls, stoles, jewellery and other items from Kashmir. In the heat of summer, many shop owners seek relief in Kashmir. But Shehjar Spices is open through the year. There is also a restaurant here called Samovar that rustles up Kashmiri cuisine. ■

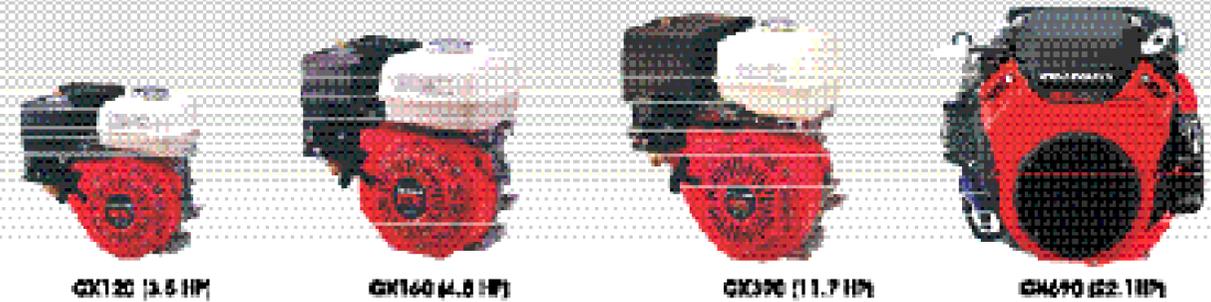
Contact: Siddharth Kaul, Shehjar Spices, Kashmiri Haat, INA Market, Sri Aurobindo Marg, New Delhi-110023 Email: shehjar spices@gmail.com; Phone: 9818963360

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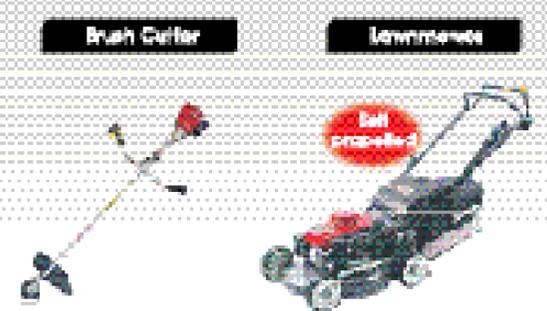
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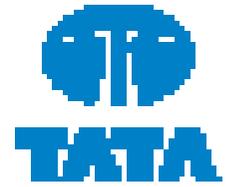
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