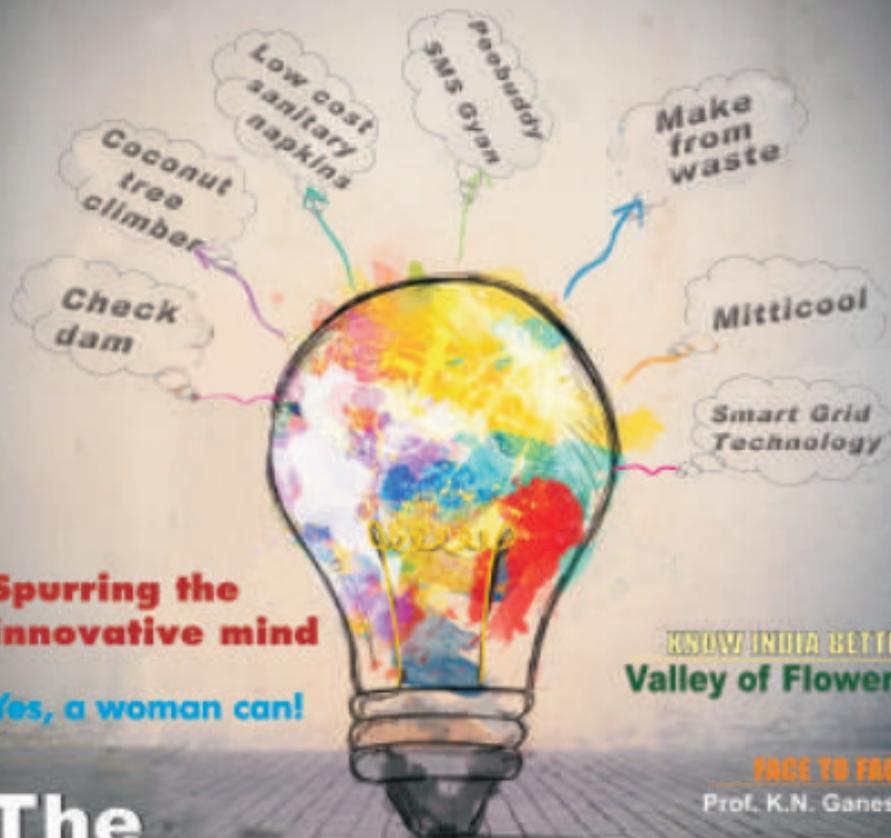


ONE INDIA ONE PEOPLE

Patriotism Redefined



Spurring the innovative mind

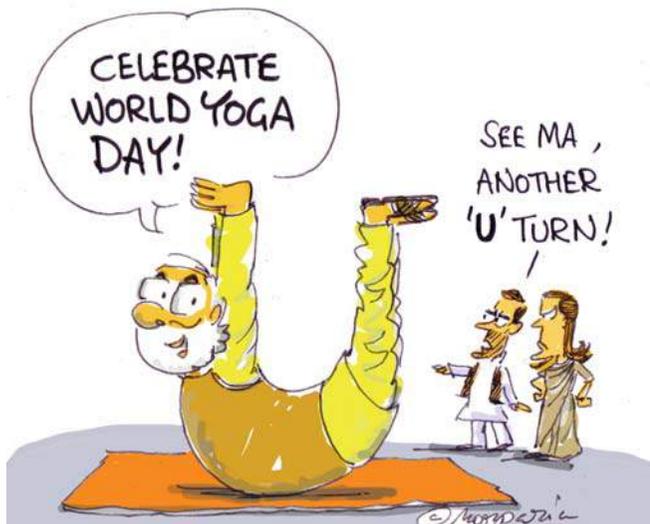
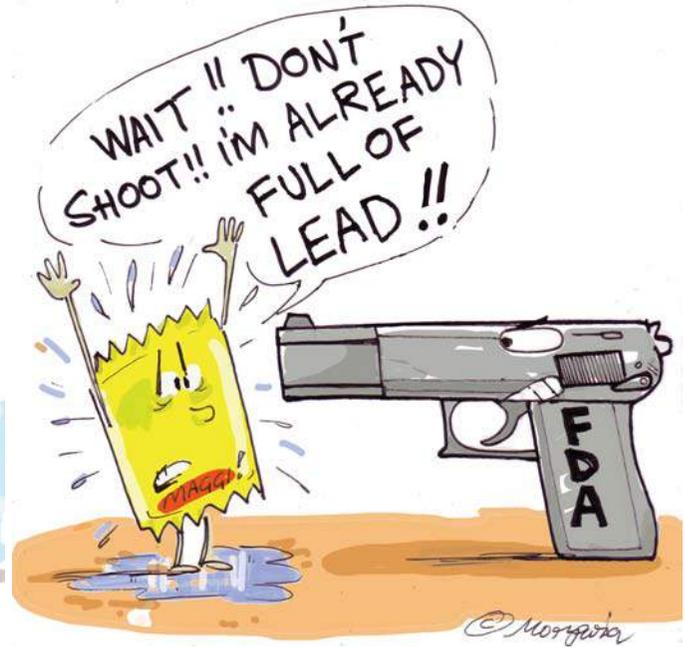
Yes, a woman can!

KNOW INDIA BETTER
Valley of Flowers

FACE TO FACE
Prof. K.N. Ganesh

The Innovative Indian

MORPARIA'S PAGE



E-mail: morparia@hotmail.com

Contents

JULY 2015

VOL.18/12

THEME:

The Innovative Indian



6



23



Prof. K.N. Ganesh

Morparia's page	2
Towards an innovative India	5
<i>V. Gangadhar</i>	
Spurring the innovative mind	6
<i>Milind Joshi</i>	
The menstrual man	8
<i>S. Saraswathi</i>	
Yes, a woman can!	11
<i>Deep Bajaj</i>	
The outlier	13
<i>Kumar Sundaram</i>	
Innovating from waste	17
<i>G. Venkatesh</i>	
Powerful solutions	19
<i>Harit Soni</i>	
Frugally yours	20
<i>E. Vijayalakshmi Rajan</i>	
Know India Better	
Valley of Flowers: a floral symphony	23
<i>Gustasp & Jeroo Irani</i>	
A gentle Himalayan trek	33
<i>Disha Shetty</i>	
Face to Face	39
Prof. K.N. Ganesh: <i>Anuradha Kalhan</i>	
Features	
Northeast's disputed lines	42
<i>Tulika Sarmah</i>	
Stop the division - now!	45
<i>V. Pramod</i>	
A Himalayan blunder	46
<i>Dr. Chandani Bhattacharjee</i>	
Are schools restricting knowledge?	48
<i>A. Hari</i>	
Cultural Kaleidoscope	
Behind the veil	50
<i>Shoma A. Chatterji</i>	
Column	52
Rural Concerns : <i>Bharat Dogra</i>	
Economy : <i>Anuradha Kalhan</i>	
Young India	54
Great Indians	56



Pandit Deendayal
Upadhyaya



Havaldar Bhanubhagta
Gurung VC



Bhicoo
Manekshaw



Managing editor
Mrs. Sucharita R. Hegde

Editor
Anuradha Dhareshwar

Assistant Editor
E.Vijayalakshmi Rajan

Design
H. V. Shiv Shankar

Marketing
Mahesh Kanojia

OIOP Clubs
Vaibhav Palkar

Subscription
Nagesh Bangera

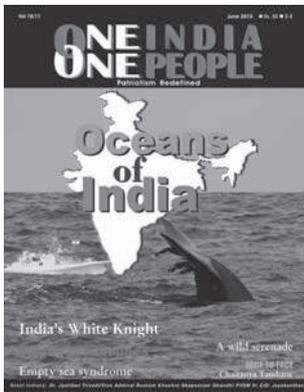
Advisory board
Sucharita Hegde
Justice S. Radhakrishnan
Venkat R. Chary

Printed & Published by
Mrs. Sucharita R. Hegde for
One India One People Foundation,
Mahalaxmi Chambers, 4th floor,
22, Bhulabhai Desai Road,
Mumbai - 400 026
Tel: 022-2353 4400
Fax: 022-2351 7544
e-mail: oiopfoundation@gmail.com
oiopsub@fouressindia.com

Printed at:
Graptone (India) Pvt. Ltd.
A1 /319, Shah & Nahar
Industrial Estate, S. J. Marg,
Lower Parel (W)
Mumbai - 400 013

visit us at:
www.oneindiaonepeople.com
www.facebook.com/oneindiaonepeoplefoundation

LETTERS TO THE EDITOR

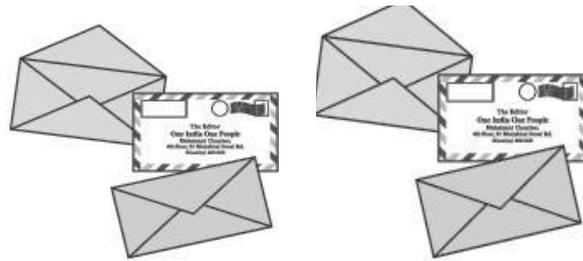


“Colours of the cage”

This refers to the write-up ‘Colours of the cage’ by Human Rights Activist, Shri Arun Ferreira (One India One People, May 2015 issue). There are black sheep in every profession and the police are no exception. They take the law into their own hands just because they are supported by thugs and corrupt politicians.

The police possess vast powers, but they are supposed to be used for maintaining law and order and rendering assistance to the public, and not falsely implicating and arresting them like they did to Arun Ferreira in May 2007 by falsely implicating and arresting him in false cases.

Instances of attacks by the police on innocent citizens and misuse of power by them are reported in the media almost every day. I too have suffered at the hands of the police on account of no fault of mine. And when I went to the Police Commissioner's office to lodge a complaint, they just wouldn't



listen to me or write down my complaint. The very men who are supposed to uphold the law are routinely found misusing their powers. What is equally shocking is that senior officials ignore complaints of police high-handedness.

– Jubel D'Cruz, Mumbai (received via email)

Excellent colour pages

I read your June issue and must compliment your magazine on the excellent colour pages. Both the ‘Know India Better’ features made for pleasurable reading. I have visited Bandipur Reserve some years ago and the feature ‘A wild serenade’ brought back some beautiful memories. India is a treasure trove of such wildlife and nature, sadly we don't treasure it as much as we should. I hope by writing about such places, you bring more awareness.

– B. Nagesh, Mangalore

Letters should be addressed to The Editor, One India One People Foundation, Mahalaxmi Chambers, 4th floor, 22, Bhulabhai Desai Road, Mumbai - 400 026 Tel: 022 - 2353 4400 Fax: 022-2351 7544 e-mail: oiopfoundation@gmail.com / oiop@vsnl.net www.oneindiaonepeople.com



**WORLD CLASS
QUALITY MEDICINES
AT AFFORDABLE PRICES**

BLUE CROSS LABORATORIES PVT LTD.
PENINSULA CHAMBERS, LOWER PAREL, MUMBAI - 400 013,
INDIA.

Towards an innovative India

Development, dynamism, progress... these are some of the words to describe India. Add 'innovation' and you get a more complete picture, points out V. Gangadhar.

THERE is talk going around that in just one year under Prime Minister (PM) Narendra Modi, India has achieved more than all earlier Prime Ministers put together. Mind you, some of these PMs were high calibered people like Nehru, Indira Gandhi and Narasimha Rao. Yet, in just one year NaMo has done 'chutti' of them.

Every day something new happens and the nation is thrilled. The action is more dynamic in the fields of art and culture. One of the great innovations of Modi India is the fusion of the old and the new, ancient and modern, which should be a lesson to other nations. The most recent of these was the appointment of Gajendra Chauhan, RSS and BJP stalwart, sometime alleged actor, who is now chairperson of the Pune Film Institute. Chauhan was warmly welcomed with a total strike celebrating the appointment. After all, Chauhan (known among friends as 'Gaju') played one of the most significant TV roles in history, that of Yudhishtir, the eldest of the five Pandava brothers in the TV serialisation of 'Mahabharat'. Naturally, Chauhan was the personification of honesty, truth and godliness.

No wonder, the FTII will undergo massive changes under Chauhan's leadership. The Institute will function under six different wings each named after major Mahabharat characters – the five brothers and the mother Kunti. Leading by example, Yudhishtir (Chauhan) will get the 'Dharma' wing which will be in charge of all the institute's 'Dharmic' activities. Since the eldest of the Pandava brothers was less inclined to take to arms, battle craft will not be of much importance. Chauhan will also be in charge of the 'Gullibility Cell' because of his reputation of a gullible person who believes everything he hears. With advice from important BJP leaders like Arun Jaitley, Dr. Subramaniam Swamy and BJP experts from the stock market, Yudhishtir will be guided by a top advisory council of Dalal street experts like Debenture Sheth.

Since the problems of Yudhishtir were due to his lack of skills in gambling which led to his defeat by Shakuni, the NDA government, unwilling to take any chances will

organise the first-ever gambling tour of the FTII chairman and his key aides. They will visit important casinos in Monte Carlo, Paris and Macau and learn all the tricks used by Shakuni and company.

A major flaw in the NDA armour will thus be rectified. Of course, some major changes from the past will be ushered. The BJP Yudhishtir will certainly not have any stripping of Draupadi. Though some of the BJP delegation members were keen to visit the European flesh pots at Cannes, Nice, Bonn and Paris, the plan was vetoed by NaMo himself as it contradicts the concept of Indian womanhood. The FTII under Chauhan will not allow any stripping scenes, be they of any Indian women or even foreigners. Sunny Leone had already made plans to leave India for the Scandinavian countries where there is more 'freedom' for such scenes. On the Indian screen, wizard boy wonder Karan Johar will present a musical 'Draupadi'.

The FTII under Yudhishtir will impose a strict censor and moral code. Semi, total, frontal and rear nudity will be out. Dialogues will be chaste and devoid of 'ma-behn' *gaalis*. If circumstances did need some strong dialogues they will be written and delivered in Sanskrit. This job will be handled by a special Sanskrit *gaali samiti* which will be in charge of all 'mild, family-oriented' *gallis* which will not affect a Hindutva audience. The entire programme will be conceived by Smriti Irani.

Yudhishtir's role will be true to life. In view of the drought-like conditions in the country, the food intake of Bhim (who eats half the food collected by the Pandava exiles) will be reduced by half. Our new Yudhishtir will run a tight ship. There

will be only fleeting 'guest' appearances by Nakul and Sahadev who, like BJP and RSS workers, only nod to their bosses. The cadres will provide these, thereby saving more money. ■



The writer is a well-known satirist.

Spurring the innovative mind

What encourages innovation? What are the conditions necessary for the success of an idea? Are Indians innovative? **Milind Joshi** examines and answers these vital questions in his quest to understand the environment necessary for innovation.

Compare these two sets of statements.

“Indians have an amazing sense of innovation, aka “jugaad!”

“We Indians have been innovating things since millennia!”

“Our mythological literature is replete with ideas which the western world is rediscovering only now!”

And,

“We Indians can never come up with original ideas!”

“Indians can only copy ideas generated by others especially the westerners!”

“Even after almost 70 years of independence we still are unable to think independently as a nation!”

Depending on how one judges our own progress over the last few decades, it is more than likely that he/she will believe in one of the two sets

listed above. Both these statements are stereotypical and it is far easier to staunchly believe in either! However, as the cliché goes, truth is somewhere in between!

What is a conducive environment?

If we look at the development of human beings over the millennia, no particular race, nation, religion or geography can truly claim to be more innovative or entrepreneurial than the others. This is not to say that all the parts of the world have developed equally. However, what matters is the

support structure a nation offers to promote innovation and the incentive it offers to the entrepreneurs. It has been thought that a nation progresses rapidly when it is enjoying peaceful coexistence with its neighbours, is replete with a bounty of natural resources, has been blessed by the weather gods, etc. This assumption seems valid in a more general sense, but not in absolute sense! A number of innovations have taken place during peace time as well as when nations were at war. Similarly, when a nation has faced adverse conditions,

its people have come up with revolutionary ideas to overcome the adverse conditions. Thus, the innovations that were done during war time were later adapted to peaceful times and for non war purposes. Nuclear energy is one example which comes to mind in this context.

That gets us

back to the question, what environment is really necessary for the growth of innovative ideas? Though, as mentioned earlier, innovations did happen during violent eras in the human history, a far greater number happened during peaceful times. However, if one looks closely at the social environment that fosters the growth of new ideas, one thing is quite clear; the growth happened only when the nation or the society valued these new ideas. Thus in peace time, it was the innate nature of human beings to improve the living conditions, while during wars or adverse natural conditions, it was the same innate



nature to ensure survival. This again corroborates the fact that when a nation valued innovation and supported it, new ideas flourished. Now, let's take a look at the factors critical for innovation to thrive.

The first and foremost requirement is how the nation or the society perceives innovation. It is imperative that a nation or a society value newer ideas and respect the innovator. Needless to say, that without this support, innovative ideas will not thrive.

Another vital support an innovator or an entrepreneur needs is adequate funding. It is a known fact that many good ideas have unfortunately suffered an untimely death because of lack of money. Money may not be able to buy one love but at least it can certainly help an entrepreneur to succeed!

The third critical component is expert guidance. An entrepreneur's journey is a difficult one and it is likely that he/she will fail because of taking either the wrong decisions or taking the right decision rather late. An expert mentor with the right experience can guide the entrepreneur in such difficult times to ensure success.

The India story

Now let's look at the situation in modern India. Luckily, today's India is in a unique position compared to just couple of decades back. We have a stable democratic form of governance. The economy also is showing a robust growth. More importantly as a nation we have come to appreciate and accept the value of innovation in all aspects of our nation building, be it science, technology, medicine, sports, culture etc. Our economy, though still having a long way to go to become a developed nation, has understood and is willing to support innovation in terms of money and resources. Also, other nations have seen the potential of the educated men and women of India in terms of contribution to basic research in science and technology. These nations have also invested money and resources in the form of setting up research centres in India. Thus the most important ingredient, the talent, is already available. I firmly believe that as a nation we have enough talent and capability for innovative thinking.

Now let's revisit the two sets of statements I made in the beginning. If we as a nation have come to understand the value of innovation and also have the talent in abundance, then what is holding us back? Like a plant which needs fertile soil, just the right amount of fertilizer and right climatic conditions, the growth of innovation also needs a supportive

ecosystem. This ecosystem includes access to infrastructure, investment and mentoring. Each of these components is vital for the commercial success of the innovative idea.

An entrepreneur with an innovative idea may need all or some of these. Though many start the work from their own homes at least initially, they do need a working space when the team grows. This provides a professional environment for the team to work.

Also, though an entrepreneur may not take any salary for himself/herself, he/she still needs money to meet the day to day expenses and the salaries of the staff. Typically, in the early stage, this investment is made by close family members or friends. As the idea gets more developed further investment can come from angel investors or venture funds.

The last factor that I mentioned, mentoring, is equally critical. Many times the innovator/entrepreneur has a brilliant idea but may have no expertise to develop this idea and make it a commercial success. Typically, the entrepreneur lacks the administrative and managerial expertise to manage a team and also take care of the legal, financial, regulatory compliances. An experienced mentor having the expertise of taking an idea from the concept phase to a commercial success compensates for the lack of the entrepreneur's experience. Such a mentor is in a position to help the entrepreneur in not only the day to day operational strategy, but also defining an effective go to market strategy.

The fledgling eco-system

Coming to the scenario in India, things are improving rapidly. There is a fledgling eco-system that is developing. Concerted efforts by the government, private sector and industry bodies are ensuring that the entrepreneur of today can get the necessary support. Many educational institutions have set up their own incubation set ups to foster innovation. Typically though, these facilities are restricted to the alumni of the institutions. Similarly, many companies encourage their employees to come up with innovative ideas. However, these ideas, of course, need to be relevant to the parent company. Such facilities do provide the necessary infrastructure, mentoring and many times financial assistance in terms of seed investment. There are many grants also available from the government for the entrepreneurs.

There is a large number of venture funds, angel networks and private equity funds that have come up to take care of

(Continued on page 18)

Maxim

Let us not pray to be sheltered from dangers but to be fearless when facing them.

– Rabindranath Tagore

The menstrual man

More often than not, fear of ridicule and societal pressures prevent us from doing things which are unconventional and controversial. Some persist despite that and survive to tell their tale, and what a tale they can tell. Here is an innovator from Tamil Nadu, A. Muruganantham, who persisted despite every odd, in inventing the low cost sanitary napkin manufacturing machine, and has given us a most inspiring case study of human doggedness and conviction. S. Saraswathi chronicles his journey.

In the year 2011, A C Nielsen (a global marketing research firm) publicised the fact that only 12% of Indian women used sanitary napkins. Even as the nation was trying to assimilate this data, Arunachalam Muruganantham, a social entrepreneur from the Pappanaicken Pudur village near Coimbatore threw up another startling fact. He emphatically stated that if all the metros were taken off the equation, then the figure would be reduced to a pathetic 5%! As unbelievable as it may sound, 88% of women in India resort to dirty old rags, newspapers, dried leaves, ashes or even sand to absorb menstrual blood. Much before these facts were made known, Muruganantham had been travelling the length and breadth of the country advocating the use of sanitary pads among rural women.

For over seven years, he has struggled to make napkins that were affordable to women in rural India, who barely had enough for their sustenance. Today, he not only provides pads for as low as ₹ 1.50 per towel, but his simple easy-to-operate machines are installed in 27 states across India and seven other countries, providing employment to thousands of women. His selfless efforts have earned him a place in the list of Time Magazine's '100 Most Influential People in the World' in 2014. A documentary on him titled "Menstrual Man" has also been made by filmmaker Amit Virmani. Here is the story of his many struggles, the unforeseen success and his joy at finding the purpose of his life, in his own words.

Innocent childhood

I was 11 when my father died. He was a handloom weaver. My mother took over the responsibility of the family. Uneducated women in rural India do not have many choices. She was forced to take up employment as a farm labourer earning a paltry sum of Rs.5 a day.

She was a simple woman, who enjoyed watching Tamil movies. Inspired by our on-screen overdramatised mother characters, she too believed that one day her son would grow



Muruganantham with the low cost sanitary napkin manufacturing machine he invented; a boon for rural women

up to be a police inspector and her two daughters, a doctor and collector respectively.

I was 14 when I realised the impossibility of this dream. I quit school to help my mother. My first job was as an errand boy for a workshop, buying *beedis* and tea for the workers.

When I grew a little older, I found myself a job with a welder. Even during those days I tried to avoid the regular square or triangular patterns on the grills and tried to create the beautiful *rangoli* designs my sisters drew at our doorstep every morning.

Things improved marginally, and I got married. Shanti came into my life. Little did I realise then that we would soon be parted. Life had other plans for me. Even my mother deserted me and the village, where my forefathers and I grew up in, callously kicked me out.

But I persisted with my dreams and eventually won back my wife, my mother and ironically, even the villagers, who swore that they always knew I would bring glory to our village one day!

But looking back, despite my father's death, and our

subsequent problems, and my quitting school, I still have no regrets about those days. Those were the best years of my life. It may sound unbelievable, but it took me the first 17 years of my life to realise that I was actually poor. Such was life in the village; everyone was bare-footed, in threadbare clothes and barely enough food to survive, but with no understanding of being rich or poor.

How the journey began

In all my talks to students, entrepreneurs, and industrialists, in both India and abroad, I have always stressed that you don't need an elaborate plan neatly detailed in a spiral-bound book to create something brilliant. It can start from something as simple as wanting to make your wife more comfortable during her menstrual cycle. I was appalled by the filthy rags that she used. With three young women in the house, she said, it was impossible to afford the expensive pads available in the market.

With my weaving background, I thought making a cotton pad would not be too difficult. After all in Coimbatore, we have every type of cotton known to man. I did a quick study of the commercially available brand and within days came up with my first prototype.

At that time, I did not realise that I had just scratched the tip of the mountain; it was only as I dug deeper and deeper that I realised there was an entire mountain buried underneath.

My wife was neither impressed with my first effort nor the subsequent attempts. Waiting for a month each time for a feedback was frustrating, so I talked my sisters into using my pads. But they too had nothing positive to say. And after several consecutive failures, they simply refused to try out my pads anymore. But by then, I was totally fixated with the idea and Shanti began to get irritated.

Deciding to broaden my research, I approached the local medical college girls for their help. I offered them my pads in return for their feedback. This was the last straw for Shanti. Suspecting my intentions, she packed her bags and went straight back to her mother's house.

I decided to carry on with my work. Unfortunately, even the medical college girls were not very straightforward with their answers. This was not very surprising, considering the subject is strictly taboo even in the privacy of our own homes. Imagine talking about it to a stranger. So I simply requested them to put the used pads in a separate bin, which I would later collect. I believed that the used pads would talk to me.

Soon I had my first batch, which I eagerly collected and took home. I spread the foul-smelling pads in our backyard and was about to begin my evaluation when my mother walked in. She went completely berserk. She was convinced that

someone had cast a spell and driven her son crazy. She refused to stay with me, but even that did not deter me.

Suddenly, I was struck by a clever idea. I thought I would conduct the experiment on myself. I created an artificial uterus with a deflated soccer ball, filled it with goat's blood bought from the village butcher and wore it throughout the day, squeezing the blood at regular intervals into the pad, I wore under my clothes.

The experiment failed miserably and I only ended up with messy blood stains on my clothes. I was washing my bloodied clothes at the open well in the village, when someone spied me and spread a rumor that I was suffering from some sexually transmitted disease.

Some even believed that I had turned into a vampire, who feasted on the blood of young girls. Soon they were discussing about tying me upside down to a holy tree in the village. I knew then it was time to leave or be prepared to die. So like a thief, I fled from my village in the middle of the night to Coimbatore.

Even living in the city, I constantly pondered on my inability to create something so simple. After all my father was a handloom weaver, who survived in a city with 400 fully-mechanised mills.

If it were a complex mechanism with an intricate electronic circuit, I would probably have given up a long time ago. But here, I had the design and the material, so where was I going wrong?

Threadbare investigation

I decided to get the one of the store bought pads analysed at a lab. And finally I understood that the material used was not regular cotton, but cellulose obtained from pine wood pulp. Cellulose not only helped to absorb the liquid, but retained the moisture and maintained the shape of the pad.

Now came the real challenge. Like Pepsi and Coke monopolise the soft drink industry, it is Procter & Gamble and Johnson & Johnson for sanitary pads.

The machine I needed to process the cellulose would have to be imported and was estimated to cost several crore rupees. But after coming this far, I was not prepared to give up.

Armed with the knowledge I had, I set about making my own machine. After five long years of trial and error, I finally had my first pad, designed on my very own machine.

I went back to the medical college. The old batch had already graduated, so I found some new recruits. I still remember my first positive feedback.

The girl claimed she forgot she had them on and barely worried about her menstrual cycle any more. That was the day, I stopped asking for feedback. If my pad was so comfortable

that she had forgotten about it, then I had achieved what I set out to do.

I came back and sent my machine for evaluation to IIT (Indian Institute of Technology), Chennai. Without my knowledge, someone entered my invention at the National Innovation Foundation's 'Grassroots Technological Innovations Award. And from among 644 entries, I won. That was in the year 2006.

Nothing succeeds like success

It is funny how people simply assume that winning the award solved all my problems and I became rich and famous overnight. The truth is, even today I continue to struggle.

I took my first machine to a small village in Bihar, where I educated some women about its usage and the raw materials used. I stayed there for a month, spreading awareness about the traditional unhygienic practices and its adverse effects. I got the women in touch with a bank and was finally able to recover my money.

I came back and worked on my second machine, and visited another village. It was tough job convincing the women, while simultaneously trying not to antagonise their husbands, who did not like a stranger talking to their women about such personal issues.

From one machine, I went to 50; all supplied to women in remote villages reaching them through self help groups, who also helped providing financial aid. Slowly, people understood what I was doing, they wrote about me in newspapers and magazines. And when BBC (British Broadcasting Corporation) and The Hindu came knocking at my door, I knew I had succeeded.

I was hounded by investors and venture capitalists. I received many more awards and was invited to talk about my life and my invention on national and international platforms. I was invited to IITs and IIMs and even visited the Harvard University. From Coimbatore, I travelled to Tokyo, Düsseldorf, Frankfurt, the United States, United Kingdom and Spain.

And one day, five years after she left, Shanti came back to me.

The social entrepreneur with a purpose

My machine has the potential to provide a livelihood to millions of rural women. Growing up in a village, and surrounded by women in my family, I know what they have

gone through. When I started, it was the comfort of my wife that motivated me, today it is the thought of millions of my sisters in every village across the country that drives me. At present, there are over 800 brands available from the 1300 units that I have installed across 27 states in the country. They are able to sustain against the big American and European companies.

Several African countries too have expressed an interest in our machine, and if all goes well, we will soon expand to Nigeria, Ethiopia, Kenya, Uganda, Nepal and Bangladesh.

The machine is very simple and you don't need any special skills to operate it. This is an extremely practical solution to a problem that has been completely ignored for the last 60 years since our independence.

We dare to talk about women's empowerment in a country where 88% of the women are believed to be using unhygienic practices like reusing dirty old rags, sand, dried leaves or saw dust to absorb menstrual blood.

Today India ranks No. 1 in cervical cancer deaths. Poor menstrual hygiene is also one of the major causes for several reproductive diseases.

Why can't a nation capable of sending a Mission to Mars, provide its women with something as simple as affordable sanitary napkins?

We are chasing after all the wrong things in life today. For some, it is a three-bedroom apartment, while others crave an Audi. Nobody has time for anyone today.

Today I feel proud that I did not turn to investors, vulgar (venture) capitalists I call them. The more educated you are, the more complicated everything gets. Luckily I am not educated, my needs are simple. I have moved back to my rented house in the village with my family.

Monetary success and material possessions mean nothing to me. What gives me the greatest joy is that I have found my purpose in life. I have made it my mission to convert India into a 100% napkin using country while simultaneously



providing employment to millions of rural women in India. Tomorrow I will die, but this product will live after me. ■

The writer is a freelance journalist residing in Chennai and specialises in features and human interest stories. She is a voracious reader and contributes frequently to Rediff and other publications.

Did you know?

The monsoon in India is a seasonal weather phenomenon of intense rainfall between June and September, caused by moisture-laden clouds sweeping across the sub-continent from the southwest. The monsoon delivers most of India's rainfall and has a key impact on the economy. A below normal monsoon can wipe out many incomes and shrink demand for farm equipment and consumer goods. It provides most of the drinking water for cities like Mumbai. The first Indian monsoon forecast was issued in 1886.

Yes, a woman can!

Sometimes a simple journey is all it takes to trigger an idea. On a road journey, Deep Bajaj and his friends who were at first amused, then irritated and finally concerned about the lack of clean toilets for the women in their group, researched, innovated and came up with possibly the first ever female urination device in India 'PeeBuddy'. Here's his own account of how this innovation happened, the arduous journey to market it and the way forward.

WE are four couples who often travel together. On one such road trip (Delhi-Jaipur), the idea of PeeBuddy was born. All the men were happy to relieve themselves literally anywhere (be it a petrol pump, a road side *dhaaba* or even in the lap of Mother Nature - in the open) but for the ladies, it was mayhem. We would stop at five toilets and then they would use one. And every time this would happen, we men would make fun of their inability to adjust to any loo and how this frequent stopping/rejection of loo/pre-planning of drinking fluids (in line with where the next clean toilet would come), is such a limiting factor. This is when a friend's wife Gauri cursed India for not having Female Urination Devices. She mentioned that on her trip to Europe she had seen a plastic device using which women could stand and urinate. This one sentence rang a bell and I decided to pursue this. While most friends ridiculed the idea, I was hooked on to this thought.

Once we were back in Delhi, the research started. I was joined by my co-founders/partners Mohit Bajaj and Rahul Anand and we decided to stay away from the plastic device (which a woman is supposed to use, wash and keep it back in bag) and do something which is portable, disposable and easy to carry. After hundreds of prototypes and testing, the current shape of PeeBuddy was designed by Rahul, manufactured (tested again) and finally launched in early 2014.

Problems galore

So here we were, all settled in our respective careers and doing PeeBuddy meant leaving that behind in pursuing something which was unheard of in India (with no market!),

and at the same time challenged the traditional thoughts/comfort zone/principles/ideologies. We still decided to give it a sincere shot.

When the first lot was manufactured and we took it to Modern Trade Stores we were bullish. I thought they would just love us for addressing this issue – sanitation. Women in India have such limited mobility due to unkempt toilets.

Be it at restaurants, railways, long haul flights, highways and concerts etc, they either have to clean the seat (with tissues) or squat/make chairs or hold it in (which by the way can result in kidney stones), and this product we felt solved it with a simple product. However, fortune here didn't favor the brave and we were shown the door on some or the other grounds. I was shocked when two top retailers who target the maternity segment and sell breast pumps etc., refused to keep it! During pregnancy the bladder is so volatile and prone to infections! Pharmacies should have kept it for arthritic patients but there too nothing was working out.

The first three months were bad, we had invested a lot in the process and here we were with all the stock still with us.

A change of strategy

That's when we decided to change the strategy. We decided to NOT go through traditional channels and instead sell online to show acceptance, and then work backwards. So we made the product available at leading online portals and from there things started to change. In the next quarter we decided to target leading gynecologists, orthopedists and urologists who were happy to encourage us and gave us





Team PeeBuddy:(L to R) Deep Bajaj, Rahul Anand, Mohit Bajaj

recommendations. We showed these letters of support to pharmacies and got slots at leading pharmacy chains. In the following quarter we moved to Modern Stores (showing online acceptance, sale from pharmacies etc), and forward thinking stores like 24x7, Dabur new u etc., gave us space; lastly, we targeted on the go segment (women travelers) and made PeeBuddy available at WHSmith (airports).

Early this year we started writing to leading event organisers and by God's grace Procam International was the first event brand to address the concern by allowing us in their mega event 'Standard Chartered Mumbai Marathon'. They understood that women runners (no matter how hard they try to keep their porta toilets clean), don't get access to hygienic toilets and hence they gave out PeeBuddy to all females. We will partner the Bangalore marathon next.

Going forward, we need more and more stores, especially modern trade chains to stock PeeBuddy, we would like event organisers (who charge for tickets/offer a service) to offer PeeBuddy to all their female customers and would urge railways/airlines to take cognizance of the matter. Giving out PeeBuddy, is not admitting that your toilets are dirty, but it's a gesture to empower women, it's about giving them the freedom to decide what's clean and what's not. In a long haul flight any woman is just one man away from a horrible experience. Same is the case with restaurants, pubs, marathons, concerts, where

no matter how hard organisers try, after a point, toilets become a mess.

So far, we have sold some 20,000 packs, but this is far from being a financially viable product, and unless women come out to support this product, this product will fizzle out. We are fighting a battle where if we present a product to 10 men, only three show support and when we talk to 10 females, eight love us back. So it's clear that unless women spread the word, push stores to stock it, this would not go anywhere. At our end we are trying to keep the journey going.

Support for innovators, as radical as us, is limited. People, including investors want to support fool-proof tech start-ups, PeeBuddy is a social innovation, would take time but once people know about it, it will serve Indian women for a long time. Right from young girls (who go to college), to working women (road/railway/flight), to travelers (adventure camps/highway traveler) to elderly (arthritic patients), this product is the need of the hour and needs mass awareness.

Products in the pipeline

We as a team want to stay focused on sanitation and female personal hygiene segment and hence, all our upcoming products would be in this category. Next we plan to launch 'INWI', which is India's first intimate wipes brand for women on the go. As of today, an Indian woman has to use regular facial wipes in the absence of an alternative. With INWI, she would have a specially prepared product for her bikini, breast, under arms area.

PeeBuddy is not here to prove a point, it's here to address an issue which, whether we like it or not, stares us right in our face every day. I am doing my bit to keep the journey ON, and all I can do is request you all to please support, spread the word. ■

The writer is a passionate serial entrepreneur who started with insurance and moved to events and advertising. He expanded into handmade carpet manufacturing and marketing in 2009, and has also executed multiple premium hospitality projects across the globe. He is now into Greenfield product/service conception/marketing with PeeBuddy since 2014. He is a post-graduate from the Australian National University and loves to challenge the status quo. More details about the product PeeBuddy can be seen at: www.peebuddy.in

Did you know?

As many as 35,985 participants belonging to 84 nationalities did asanas at the official observation of International Day of Yoga on June 21, in New Delhi. In the evening, the Ayush Ministry was awarded two world records by Guinness World Records officials at a ceremony at 'The Ashok' – one for the largest number of participants and the second for the largest number of nationalities. The earlier record for the largest number of participants at a yoga session was set in 2005, when 29,973 students from 362 schools performed yogic kriyas in Gwalior. At least 50 nationalities needed to have joined in at Rajpath on Sunday to qualify for the second record.

The outlier

This is the story of a young entrepreneur Deepak Ravindran from small town Trichur in Kerala, who from a combination of boredom, a deep interest in technology and a series of particularly fortuitous circumstances, started to innovate. This led him and his friends to found 'Innoz SMS Search', perhaps the largest offline search service in the world. The fascinating journey to Innoz is chronicled here in the first person, as told to Kumar Sundaram.

I was born and brought up in a small town named Thrissur in Kerala, which is known to be the heartland of the state's business acumen and home to many of the leading Malayali entrepreneurs. This small town had its own set of benefits in the form of ample free time. Part of it was because of frequent strikes in schools and colleges, but a bigger factor was the sheer lack of options to indulge oneself in usual fun and frolic. I remember I was fascinated by the world of electronics at a very young age. So, my dad decided to give me some space in a garage where I built my first model for a science exhibition at school. I won the first prize and my dad gifted me a toy car as promised by him. I was very curious to know how the car worked. So I decided to take it apart and see all its components. My mom was furious at the total loss of the new gift but my dad was amused. He probably knew what I was up to.

The first encounter

My first encounter with a computer happened at the age of fourteen when it arrived in my neighbourhood. In those days it cost about ₹ 1 lakh, well beyond what a middle class family like ours could afford. Thankfully my dad, a government employee, was undergoing a computer training programme at the same time and brought home several computer-related books. I read them all one after the other. I was amazed to see how this small machine could process input of varying complexity and produce the desired output almost immediately. In no time, I was hooked to it; it was magical.

I was in the 8th standard then. My school did have a

computer library but it was open only to students of class X and above. I don't really know what he saw in me, but thanks to the library assistant who allowed me to come and see the device after evening classes without a formal permission from the Principal, I got to know the fascinating machines up close. As days passed, I had started to nurture a dream of owning a computer myself someday. As they say – 'Man proposes, god disposes'; affordability remained a big issue.

But when money is scarce, spirits are generally abundant. My dad put forth one condition that he would buy me a computer, if I scored a distinction in my class X board exams. I doubted if I could accomplish this since I somehow wasn't particularly passionate about doing exceedingly well in academics. On the other hand, I had every reason to give my very best and make this happen for there would be a computer at the end of it.

I, for once, put my heart and soul into the "mission" and a mix of hard work and God's grace got

me the distinction. Soon, I was the proud owner of a computer. More than the fun games and word processors, the Web excited me the most. It was almost like a genie at your service. As I started to understand the web better, I developed an intuition that the Web was going to be the future. That was the time when Web was still not very prominent in India but was exploding in Silicon Valley in the US (United States). I found only a handful of online ventures like Baazi.com (currently Ebay), and I was itching to contribute in a meaningful way towards this growth story in India.



Deepak Ravindran

Nature and nurture

Relatives and friends say I was truly a precocious kid. I would like to attribute some part of it to genetics, but a large part of it to my upbringing. I owe it to my parents since they never became a hurdle in my way to pursuing my dreams. At some point I realised that my parents, despite the generosity of the oceans in their hearts, just could not fund the ambitious goals I had set for myself. I had to do something to help them. I had an entrepreneurial streak which prompted me to set up a web design firm at the age of 16. I was quite inspired by the Shah Rukh starrer *Swades* during my class X days, and now, when I had a venture of my own, I named it 'Swadesh Solutions'. We designed websites for local shops, schools and even temples. Thrissur was getting an online footprint faster than any other city in India!

The Kerala acumen

I will tell you something about people from my state. Like true opportunists, if we ever saw someone having the right formula for success, we would definitely see for ourselves if we can replicate the same recipe and make some money out of it. I was really impressed with the B2C model of online selling of used products through platforms like Baazi. While still at high school, the novelty and uniqueness of an idea struck me almost instantly and I went on to start an e-commerce deal website – 'just4sale.in' with a catchy tagline – 'Light Price! Right deal!' I mostly sold items to people in my friends' circle. Meanwhile, I also purchased my first phone, but the joy of owning it was taken away when I figured out that another shop sold the exact same phone at a relatively lower price. I call it a blessing in disguise since it prompted me to include a feature on my website using which buyers could compare prices from multiple vendors before zeroing down on the final purchase decision. I also persuaded vendors to put up attractive offers and volume discounts to boost sales; a concept known as 'second degree price discrimination', taught in great detail at some of the premier B-schools. I read about it almost 10 years after I had successfully implemented it! I'm not trying to ridicule the significance of wealth of knowledge stored in textbooks, but I firmly believe that true learning can only happen at work. It was precisely what Groupon did a couple of years down the line.

To support my current business, I started selling software CDs and made enough money to buy IT magazines and other computer hardware which I wanted to study in detail. I tasted profit for the first time and understood how operating margin could play a critical role in ensuring sustainability of any business. It was even more relevant in Indian context, where sources of external funding were limited. I was practically unaware of Angel Investors or Venture Capitalists in those

days, so had to pool in money from relatives and friends for my business but that also meant greater accountability. In fact, I couldn't openly discuss my enterprising plans with my parents for obvious consequences but they had also accepted by the time that I was on to something else, something big. And I repeat this time and again; had it not been for their support, I wouldn't have come this far.

I cracked a good number of deals that year and was featured in many small magazines. However, many of my friends relocated to different cities to pursue college education after class XII and I was left on my own. Unfortunately, I had to shut down the business.

I remember how I ended up getting better rank for medical entrance than that in engineering and people around me started to convince me to join a medical college for the simple reason that it had better prospects in terms of a fat paycheck and a beautiful bride. My idea of a good career was in complete contrast with the popular consensus. To me, it meant something I could look back at and be proud of. Finally, better sense prevailed and I had the courage to follow my heart.

Then happened Lal Bahadur Shastri College of Kannur University at Kasargod. It was lots of fun but honestly, I was a bit apprehensive to start with. It was the first time I was going to stay outside my home. It later turned out to be a great opportunity to interact with students from different parts of the country.

SMS Gyaan - connecting the unconnected

On one of those days, I was sitting with my friends discussing how to impress girls. A friend of mine opined that there is this powerful thing called 'Google' which supposedly has solution to all our life's problems and could potentially play 'Love Guru' for us. I used to have a Nokia 1100 phone those days which didn't facilitate internet access like that of modern-day smart phones. I was saddened for a while before the eureka moment arrived. I realised I wasn't the only one feeling so helpless about it, there were 900 million Indians who shared the same anguish and pain.

I connected more with my backbencher friends than anybody else. What I liked most about my college was that it had what I secretly wished for - free wi-fi connectivity throughout. I took an education loan, bought a laptop and started spending more time with it. My computer teacher spotted where my genuine interest lay, and offered me a challenging project. I revamped my college website completely and was an overnight star in the college campus. I was looking for more like-minded people who believed in the power of technology to change the world. Our Dean was generous enough to provide us some space in the college building so that we could start working on our idea. I built and started to

manage a small team of web designers. I had to learn and train myself on skills of delegation and team management over next couple of months.

The four of us - Abhinav Sree, Ashwin Nath and Mohammad Hisamuddin joined in - to get it done. Abhinav and Ashwin were my classmates but Hisham was a year senior to me and we had a few things in common – we didn't mind skipping classes and were all big time enthusiasts of internet. In our team, Hisham had great ideas, 'Wikipedia over SMS' was in fact one of his final year projects and I, on the other hand, was an opportunist *Mallu* to the core. The biggest hurdle was that neither of us was a coding expert. Back then, we had no vision of a multi-million dollar company, all we were trying to do was to solve an intriguing problem at hand. We could clearly see the growing addiction for texting among youngsters and wanted to seize the opportunity it presented. Eventually, Ashwin helped us build the prototype within a week or so and thus formed the union of four of us who later co-founded Innoz in 2008. Its mission is to connect the unconnected. We want everyone to access information from the web, without the hassles of internet connectivity. Innoz SMS Search has processed over 1.3 billion queries from over hundreds of millions of users around the world.

We raised about two lakh rupees from our family and other acquaintances to kickstart our journey. We wanted to ensure that our operational cost beyond travel would be minimal. It helped that we were still operating from college campus and didn't have to incur any additional rent or food expenses. Being student entrepreneurs helped us get adequate media attention which turned out crucial over next couple of years. We continued to upgrade our product as we strived to answer user queries of all sorts. It was in Feb 2009 during the 6th semester of college that I ended up getting a call from IIMA's (Indian Institute of Management - Ahmedabad) incubation programme 'i-Accelerator' to fund our project. We had to decide between final exams and the train to Ahmedabad and trust me, we had realised that we had learnt lot more than our peer groups in college, and had complete clarity that we only wanted to do things which we liked.

Over the next couple of months, we also received additional funding from Technopark but now the focus was to find ways to monetise the idea of 'SMS Gyaan'. I knew I had a great idea but had little clue how to make a great business out of it. I dropped out of college and next went to Gurgaon, the telecom valley of the country.

I don't think it was luck. It was sheer persistence.

Hitting the big league

I went to Airtel office where I wasn't initially allowed to meet senior officials. A large number of people thought that

at my age, it was next to impossible to have a great business idea and they wrote me off even before I had pitched my story. I was aghast at the prevailing injustice in the world but more importantly, I never discounted my own ability to sell things and it kept me going. I sat mostly at the reception desk and the coffee shop within the Airtel office and pitched my idea to anyone and everyone who had the company I-card. Fortunately, one fine day I managed to convince an executive named Nitin Mishra who asked me to meet him in his office the next day. Nitin was the head of new product division at Airtel and was keen to launch the service at the earliest possible. Seeds of disruptive innovation were being sowed and I, for once, was smiling after weeks and months of despair.

Airtel helped us scale the product big time. It also got much easier to convince other telecom providers. In hindsight, I find it amazing how things started to look all so simple. We crossed one billion queries last year and have reached out to more than 200 million users. Apart from our footprint in the US, we operate in more than 10 emerging countries including in Africa and South-East Asia. In fact, we ourselves never thought that the product would go viral globally but it just so happened that people liked the product and there was a pressing need. Going forward, it will be increasingly important to have the right focus. Rather than becoming a search engine competitor to Google, we rather plan to invest heavily in content discovery platform which has been our USP.

When good things come, they come in a pack. We won several awards one after the other. We were selected among the Red Herring Global 100 and Asia 100 winner for 2010 as being among the most promising private ventures from around the world. NASSCOM (National Association of Software and Services Companies) named us among Top 8 Emerging Companies in India for 2011. I was also nominated in the MIT Technology Review's under-35 outstanding innovators' list. 'Wired' magazine named us "Offline Internet" and Limca Book stated that we are the largest offline search in the world.

SMS queries – a peek into how India thinks

We get all kinds of questions on SMS Gyaan which we later rebranded as 55444. Why is Angry bird angry? Why is Apple half bitten? Why is a hot dog called so when it has nothing to do with a dog? We tried to come up with answers like "angry birds are so angry because a group of green pigs stole their eggs."

There were numerous such funny queries but what gives me real satisfaction is the fact that a large number of women were using it as their private companion and could confide in a technology when they were sceptical of reaching out to other people out of shame or distrust.

Once the Gyan engine gets a query from a mobile user, an algorithm spiders the world wide web for related information, zeroes in on the most relevant inputs, and then shortens it to be sent to a mobile. Various categories are currently available such as encyclopaedia, dictionary, acronym, live cricket scores, movie reviews, book reviews, weather alerts, stock market, gadgets prices and calorie meter. Other recent additions include localised searches, job search and even a health service over the phone. Every time a user texts a query to '55444', Innoz's software searches through its own files and vast internet databases to pull out appropriate answers. Responses are sent within seconds. An "unlimited questions" subscription costs only ₹30 and mobile service providers share with it their revenues.

Those seeking replies are mainly 18 to 25 years old middle-class Indians from small towns and cities who do not have internet access. And their questions present a fascinating glimpse into the mind of the young, 'middle' India. From Satara in the west and Imphal in the east to Rajahmundry in the south, love and romance, education and career, Bollywood and cricket are what fascinate India's small-town youth the most. Others want to know how to get rid of dandruff, to become rich, to forget someone, or to gain height.

The queries are in Hinglish (a mix of Hindi & English), Kangleish (Kannada & English), Tanglish (Tamil & English) and a host of regional variations. The company plans to add translators and voice-based on demand to the services. Apart from the US, Innoz operates in more than 10 emerging countries including those in Africa and southeast Asia. Developing countries have 70% mobile cellular penetration but only 21% internet penetration. Providing access to internet in a convenient and affordable manner has helped the company become popular.

Innoz hosted a hackathon in 2012 that allowed participants to interact with developers who had ideas for apps on the SMS platform. During the 36-hour hackathon, about 150 technologists wrote codes for various apps using the platform.

I have enough ideas in mobile technology space as of now but if I ever feel there isn't enough scope to innovate, I will quickly move on to something else. But our bottomline is – once an entrepreneur, always an entrepreneur. When I look back at some of my childhood initiatives, I think some of those ventures didn't quite flourish simple because I was way ahead of time. But it is not such a bad thing after all.

Talk of joys of being an entrepreneur and you will lose

count. Think of the delight at being the largest job creator for the same college campus that one went to, and it can't get any better.

Looking beyond cricket and Bollywood

But if you ask me what India needs most at this date, I have a simple answer that the country needs heroes and idols beyond cricket and Bollywood. We need more entrepreneurial and research-oriented success stories to come out in media so that the young generation starts to aspire and idolise them. I often tell people that one can take chances when one is young so that one has good number of stories to tell when old. I don't recommend everyone to start their own ventures but I know in my heart that technology definitely is going to rule the world and coding literacy is going to be as important as literacy defined in traditional jargon.

I also want to do my bit to give back to my roots. With potent support from Kerala government, I have set a target of incubating more than 1000 start-ups by college graduates in the next ten years at India's first Public Private Partnership model technology business incubator spread over one lakh sq ft at the Indian Telecom Innovation Hub - Technology Business Incubator (ITIH-TBI or Startup Village) in Cochin.

I also launched an initiative called 100 Rockstars to support student ideas and technology projects with incubation and funding. I am an influencer at Startup Corridor which identifies a dozen or so true entrepreneurs in India and fly them as a group to visit Silicon Valley for two weeks. The 'Corridor' is the brain child of venture capitalist Asha Jadeja Motwani, widow of late Stanford professor Rajeev Motwani, who was a mentor to the likes of Larry Page and Sergei Brin, and key architect of the algorithms that powers Google.

Nothing would make me happier than to see more Indians across different states creating jobs than working for giant MNCs. We have long been an outsourcing hub, now is the time we need to lead the technology revolution right from the front.

To conclude, I must acknowledge that lot of things did go my way. Right from supportive parents, the helpful librarian, an understanding professor, the big-hearted college dean, genuine friends to receptive customers, it looks like a dream run but there were times, I got stuck too. But I kept going with the belief that things can only get better in life. And most certainly, they did ■

The writer is from IIM, Bangalore.

This year's sleeper hits

A slew of low-budget movies in India in this year have proven that one doesn't need a large star cast to sell a movie. A story well-told and good actors are enough to be accepted by an increasingly discerning Indian audience. This year, movies like 'Court' (in Marathi), 'Piku' (admittedly with a star cast, but a very quirky story) and 'Kaka Muttai' (in Tamil), about two slum children making it their life's mission to eat a pizza, have proven that all kinds of stories work, just tell the story well and tell it from the heart. We hope we see more such movies in the future.

Innovating from waste

*Even in western countries, where recycling of waste happens very scientifically, there are some who prefer creative recycling. Why not make toys out of cardboard waste or teach young children their arithmetic concepts with cardboards and sketches, asks **G. Venkatesh** who makes and gifts these toys to friends' kids in Trondheim, Norway.*

WASTE paper and waste cardboard. The ones used for packaging especially. You shop from IKEA somewhere in Europe and you have a few square metres of cardboard to think about after you have done your DIY (Do It Yourself). You would simply take for granted that there is an efficient paper-waste-recycling system in town and would dutifully consign the waste cardboard and paper into the recycling bin (which we, in India, look down upon as a 'trash can'). What you deposit there will be vended to a paper mill somewhere in the region, smashed into pulp and may emerge in some other paper/cardboard *avatar* either for packaging (closed loop recycling, as they call it) or for some other purpose (open-loop). You would anyway, by doing this at least, have proven that you care for the environment, even if you do not really do so! But wait a minute. Is it possible



Learning from waste

to think laterally and differently and think more sustainably for alternatives – for social, economic and environmental gains...looking further and higher and beyond conventions? Yes, surely. This has been tried and tested by yours sincerely, on a micro-scale, or call it nano-scale, if you may, in his own home-office, a small room, with a work table.

Knowledge games out of waste

I have been reusing waste cardboard and paper in my spare time, to create 'knowledge games' for little children – boys and girls in the age-group of 3-10, in Trondheim (Norway). Well, all I need is time, inclination to make a difference, waste paper (usually got from office printers where paper is often used irresponsibly, with friends chipping in from supplies from their offices) and cardboard (packaging material, again

with some friends chipping in), pencil, colour pencils, glue, poster colours (and thereby water, paintbrush and palette). Of course, I need friends who help out and a market – family friends with children in the said age-group! What I make, I gift to children, either on their birthdays, or just as casual gifts when my wife and I go visiting. These 'knowledge games' encompass alphabets (in four languages so far, Hindi, English, Norwegian and Tamil), numbers and math, geography, animals/birds/insects, and so on. Every single creation takes time – at times, 4-5 hours or more in all, to fashion singlehandedly. But that is time well-spent, in my opinion. A rewarding experience indeed, when one sees smiles on the faces of the recipients and when the kids bring out the 'knowledge games' the next time you visit them, and urge me to play the same with them! Often, the kids are told to be free to structure their own

games and make their own rules...adding to the dimension of induced creativity at a young age. One of these kids, after having received a 'numbers-game' from me, was spotted by his teacher in kindergarten to be writing down '2+2', '4+1', etc., on his sheet of paper, when the other kids were just scribbling meaningless nothings! Must I take the blame for it, or credit? I am not sure.

A viable business idea

Well, how about developing this into a business idea? To rival the giants in the kid-games sector, who churn out thousands and thousands of different kinds of games and playthings daily, sell them at a profit, devoid of the human/personal touch? Well, not rival for that matter but test the waters and try to get a small chunk of the market-pie?

Arrange for the procurement of raw materials, initially by word of mouth and thereafter by entering into formal contracts with potential sources of such materials. One can find volunteers with the ability, interest and inclination to chip in with their time and expertise and contribute. Or there could be people recruited on an hourly-wage basis (those who are unemployed, those who are in transition between jobs, housewives who do not work outside the home, senior citizens, mentally-challenged or physically-handicapped individuals who can be trained, and even recuperating drug addicts). The potential employee-pool is vast if one would care to keep an open mind and explore. At once, a huge social contribution is made!

The products can be sold at nominal prices, and the proceeds used to pay those who would work for wages, to invest in marketing and other operating expenses (stationery materials usually), and a charitable angle – different from children, environment and education can be factored in. Say for instance, contributing to healthcare, caring for the aged and infirm, or to the Red Cross for its endeavours in famine/war/catastrophe-stricken regions of the world. Parents keen on wearing the ‘Pro-environment cap’ and/or the ‘Charitable’ label, will enroll as loyal customers and also spread the message among friends and acquaintances in kindergartens and schools. The waste cardboard will be reused – open-loop – for some more weeks or months, before finally being recycled anyway.

Environmentally, this is a super-step forward. Economically, it provides employment to different categories of people (as

listed above), and offers parents with the opportunity to purchase something at more-affordable prices serving similar purposes for their children. Socially, it is a great contribution to the educational (learn while you play) needs of children; and if among the employees, you count the disadvantaged, this will contribute immensely to including them in the economy (informal nevertheless). Psychologically, it comes with a strong ‘feel-good’ factor for the creators, the purchasers (who also feel happy at being pro-environmental, and charitable) and of course, the end-users – the children themselves.

I made something out of waste cardboard and paper – coloured self-sketched cartoons of animals and birds for a five-year-old Norwegian boy in kindergarten. He opened the cover in which I had packed these sketches, and exclaimed as he peeped in, ‘Bare papp’(meaning ‘just cardboard’ in Norwegian). He then went on to extract the contents from the cover and was delighted as he was explaining to his three-year-old brother what the sketches represented – cat, dog, camel, elephant, monkey, etc.

How about ‘Barepapp®’ for a name for this enterprise?

Note that this could become a multinational outfit with a global market, in the years to come...Anyone interested in collaborating? ■



The writer is a post-doctoral researcher in the Norwegian University of Science and Technology in Trondheim and also a freelance writer for several magazines around the world.

Spurring the innovative mind

(Continued from page 7)

the funding requirements of entrepreneurs. There are also informal local associations where entrepreneurs can interact and exchange ideas. Many agencies also conduct training courses or workshops to develop the necessary skills in an entrepreneur.

However, these attempts are still inadequate to take care of the needs of the vast majority of entrepreneurs in India. We need many more of these facilities. Furthermore, these facilities are available mainly in the Tier 1 cities such as the four metros and larger cities such as Ahmedabad, Bangalore, Hyderabad, Pune etc. There are many entrepreneurs who live in smaller Tier 2 or Tier 3 cities and have no easy access to such facilities. Also, often an entrepreneur is unaware of the ways to approach such setups and hence is unable to take their help.

What are the impediments in setting up more such

facilities? The first and foremost is the lack of financial and infrastructural resources. The second is the availability of experienced mentors to guide the entrepreneurs. Here the government and the corporate sector can collaborate to create such an eco-system. The financial assistance can come from the government and the corporate sector can contribute in terms of experienced mentors. A fair arrangement to own equity in such companies can always be worked out to make this a win-win situation for all. I am sure that if a number of such facilities come up in India, with the corporate sector collaborating with the government, we will see a rapid growth of entrepreneurship in India and undoubtedly, the first set of statements at the beginning of this article will be the norm! ■



The writer, an IIT Mumbai alumnus and President of the Pune Chapter of the IIT Bombay Alumni Association, is a freelance consultant in the area of IT. He is also on the panel of mentors of the MentorEdge initiative of IIM Ahmedabad.

Powerful solutions

India has a power deficit of 12 percent with almost 300 million people living without electricity. Conversely, transmission losses amount to 1.5 percent of India's gross domestic product. In such a scenario, achieving energy efficiency is most important. This is where Ecolibrium Energy, a smart-grid startup aimed at enabling consumers to manage power consumption in real-time, comes in. Founder **Harit Soni** takes us along as he describes his journey of innovation.

I earned my first rupee by trading WWF (World Wrestling Federation) trading cards in classes 6th and 7th, as there used to be a huge craze in those times for these cards. I had located a reseller who would sell me at a low price and I used to sell them at higher rates to the guys in school, in a small town in Kutch. That was how it all began. With the Gujarati inheritance, I was a natural at business, but was unsure about the domain where I should begin. During my 12th grade, a friend and I decided to begin a business in import-export of metal scrap, the Kandla port was near, so there was no logistics issue. It worked for some time but realisation dawned upon me that it was not sustainable and I was not bringing a change in the world at all, apart from making some money.

Sustainability the key

Right at the onset of my career it was imprinted upon me how sustainability is a very important part of not just being a businessman, but also a business leader willing to bring an impact in the way the world works. After completing my graduation in 2004 from the Bangalore Institute of Technology, I joined Infosys. Those were exciting days, the Indian IT industry was beginning to show its dominance in the world and the coolest job was to be a software engineer. Unfortunately, my continued zeal to start something on my own led me to quit after 3 months. After this, I joined AIESEC in Canada for a year, travelling to various places in the United States and Canada and got a basic understanding of how various international companies work. After returning to India, I began working at KPMG from 2005, till end of 2008, in their business consulting division. This stint of work helped me a lot in understanding the nitty-gritties of business processes which would help me in the days to come.

Since early 2008, while I was working with KPMG, the

carbon credit industry was growing in India and it was the right time to begin focusing on the start-up I had been planning for a long time. So I quit working in late 2008 and registered Ecolibrium Energy to start carbon credit trading, with diversified focus on bio-diesel and solar energy, both of which had just started taking baby steps. As an early entrant it would not just be helpful in building a brand but also increase our industry knowledge base that would solidify our technology base. Soon we realised that algae based bio-diesel was too early for its time and carbon credits would soon be phased away to focus on solar.

We did a course correction and shifted our focus to smart grids and solar. We worked for almost two years in developing a superior product which can be field tested while along the same time we were in talks with CIIE (Centre for Innovation Incubation and Entrepreneurship), IIM (Indian Institute of Management), Ahmedabad, for incubation support. In 2009 we received incubation support from CIIE, and were introduced to the Ministry of New and Renewable Energy. After working tirelessly for almost two years we managed to have a stable product which will enable on-site monitoring as well as controlling of multiple equipments.



The first breakthrough

Our first breakthrough came in the form of a pilot smart grid project for Torrent Power – a power utility company in Ahmedabad, at the site of the Gujarat Secretariat. After this project, since we were attached with CIIE, we received another project for a Smart Micro-grid from the Solar Energy Centre, Gurgaon. This was also a pilot which showcased a unique smart urban Micro-grid, as opposed to rural Micro-grids that is now a norm in various villages. While working for such projects, there was a growing clamour among the industry to provide a streamlined energy accounting procedure for proper energy management.

(Continued on page 22)

Frugally yours

Innovations which help the poorest and the most deprived, are true innovations. India specialises in such innovations, though not many are widely known, made as they are mostly in the Indian hinterland. E. Vijayalakshmi Rajan looks at a cross-section to get a flavour of the Indian mind.

INDIAN innovations are plenty and varied. They often arise not out of the need to solve some deep intellectual conundrum, but out of sheer necessity and desperation. Innovations which make life just a bit easier, or directly address the issue of cost and lack of access to basic infrastructure like electricity and water, are seen often in India. And more often than not, such innovations happen in the interiors of the country, which are that much more lacking in basic necessities and opportunities. These are also ideas which have not cost their inventor much capital and resources, just a lot of ingenuity and native wisdom.

Frugal innovations

Frugal innovations are being recognised as the acceptable, in fact, the desired way to innovate especially in poorer countries. Stripping the product of non-essentials and focusing on the core need, which in turn drive down the costs, is the way forward. Here's a look at a handful of such innovations, though there are a perhaps a million of them out there.

- **Moulding ideas with clay:** MittiCool Clay Creations is situated in Wankaner district, Rajkot. In the year 1988, Mansukhbhai Prajapati decided to innovate with clay, which was a freely available raw material. He first developed the basic clay pan called 'Tawadi' (tawa) with



A Mitticool fridge

hand pressing system, followed by a clay water filter. But all this was just the rehearsal for his best invention so far, the Mitticool fridge for the rural people who do not have electricity in their villages. This was in 2001. Made out of terracotta clay, this is an eco friendly fridge to keep things cool and doesn't use electricity or any artificial energy. This fridge can be used to

store drinking water as well as keeping vegetables, fruits, milk etc., thus solving a big problem of rural India. Today, the company has a list of about 15 products including clay cooker, pans, lamps, dinner set, curd pot and so on. Perhaps for the first time in India, a company has taken patents for the ecological, clay made home products. Prajapati who first started with handicrafts, was honoured as a 'Rural Scientist' by then President of India Dr. A.P.J. Abdul Kalam. He is also disseminating this knowledge through his 'Prajapati Hastkala Vikas Trust' under which he has trained more than 500 students in this art with help from the Government of Gujarat.

- **It's safe play time:** Though traditionally Indian toy makers used vegetable dyes, since many decades they had switched to titanium oxide bonded synthetic colors for making wooden toys. C. V. Raju inspired by his uncle decided to do something about this and has revived the dying art of making wooden toys among the craft community in Etikoppaka, Vishakapatnam, Andhra Pradesh. Raju's key contribution has been to strengthen the traditional local knowledge of making vegetative dyes, develop new tools, techniques and methods for increasing shelf life of the dyes and generate new uses. Raju's experiments have resulted in many new toys imparted with vegetable dyes for which a market is slowly emerging in India and abroad, especially given the growing awareness about the harmful effects of lead and other chemicals. The toys of Etikoppaka imparted with vegetable dyes come in various shapes and forms ranging from toys to candle stands to vermilion boxes and bangles. Their beautiful designs, bright colors and earthy appeal are very attractive and very popular today.
- **A tough nut to crack:** Mushtaq Ahmad Dar and Tauseef Ahmad of Jammu & Kashmir have invented the walnut cracker, peeler and washer. In what ways does this help? Manual cracking of walnuts involves a lot of time and drudgery. The sap of the walnut skin also burns hands and stains clothes. This walnut cracking machine can process dry walnuts of various sizes, shapes and thickness to crack

them open without damaging the fruit inside. Using the walnut washer, the time required to wash, which otherwise is done manually using hands, has been reduced by over 60 per cent. The machine can process about 80 kg of walnuts/hour leading to a huge savings in productive time.

- **Climbing without fear:** Kerala is synonymous with coconut trees and one of the popular rural professions is of the coconut tree climber. But this job is fraught with risks and also, in recent times, a paucity of skilled labour. This is where the late M.J. Joseph or Appachan as he was fondly called came in. A school dropout he had a great ability to innovate things that could be used in day to day life. He saw the struggles faced by tree climbers, especially when it came to climbing the tall coconut or areca nut trees. He decided to solve this problem by inventing a simple and innovative tree climber that makes the task of climbing very easy.

Traditionally, professional climbers have been engaged by coconut planters for plucking the fruits from the top of the coconut trees. Appachan developed this device under the guidance of his father. The coconut tree climber consists of two metal loops that are meant for holding the legs. They have a handle at the top for hand grip and a pedal base at the bottom. The loops are put around the tree trunk on the opposite sides. The loop on either side is lifted up by the simultaneous movement of the hand and feet. By such alternate motion, one can easily climb a coconut tree in minutes. Appachan and his tree climber bagged a prize in the farm implements category in the Second National Grassroots Technological Innovation and Traditional Knowledge Competition, organised by the National Innovation Foundation (NIF-India) in the year 2001-2002. Villagers then gave him the title 'the local Spiderman'. Coupled with some basic safety devices like a harness, this device makes climbing up a straight-trunk tree or a pole quick, easy and safe.

He made some other innovative products like the instrument that could squeeze coconut milk and juice from fruits. But his most popular innovation is the tree climber. Appachan's contribution is not only in inventing this particular tree climber but also in inspiring a whole lot of people. Prominent among them are innovators like Mushtaq Ahmad Dar of Jammu and Kashmir (featured earlier in this article), who has also developed a smaller pole-cum-tree-climber and D.N. Venkat of Tamil Nadu, who has developed a seating type tree climber.

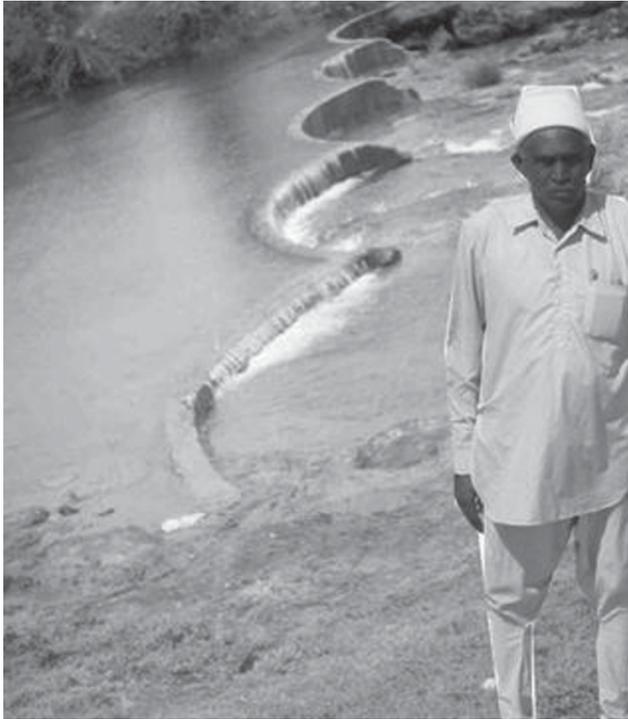
- **Check out this dam:** This is what acute water scarcity does – it inspires people like Bhanjibhai Mathukiya of Junagadh, Gujarat, to build dams using local materials. This farmer innovator lives in an arid region, prone to water



Appachan's coconut tree climber

scarcity. His path breaking innovation consists of a modular check dam built using the arch shaped bunds in sequence. The farmer built the first dam across a small river running through the village. It consists of a series of semicircular arches beneath to support the weight (akin to railway bridges). The dam not only costs less than conventional ones, but is also more stable and easy to construct. It resists maximum water pressure and force because of its unique design and structural strength. He used locally available materials such as stones, river sand and very less manpower – just one mason and four labourers to build the dam. The low cost dam was built in 4 days and at a total cost of Rs 10,000. This dam has made the area a green zone. The check dam prevents water from running off and also recharges the water table. This check dam model can be constructed easily by individuals or co-operatives with little or no help from the government. Till date Mathukiya has built about 25 check dams in Gujarat and Rajasthan.

- **Not just child's play:** Science educator Arvind Gupta used very simple toys to teach. A graduate from Indian Institute of Technology (IIT) Kanpur, Arvind Kumar Gupta took a year's leave from his company to work with the grassroots village science teaching programme for children in the tribal district of Hoshangabad, Madhya Pradesh. While



Bhanjibhai in front of the check dam he built

Powerful solutions

(Continued from page 19)

Those days, it was just one person, who used to sit and create multiple daily reports for some of our initial customers, and provide them an overview of their power consumption and where the fault areas lay. We decided to replicate such a system for the industry and hence SmartSense was born. Our first customer was CETP (Common Effluence Treatment Plant) at Odhav in Ahmedabad. CETP had a problem of monitoring their power consumption on a real-time basis, which our system could do. The solution was unique since it didn't involve the need of an existing IT infrastructure or installing any software at the client's end. It was just one device to be connected at any point where monitoring was necessary, and the data could be accessed through any internet enabled device through an online portal. Apart from this, the system provided for automated, user configurable SMS and e-mail alerts as well as daily reports in customised formats.

After user acceptance, we began pushing for this solution across various industries in Ahmedabad. In 2012, MIT Technology Review magazine acknowledged our innovation and published our story as 'Innovator under 35', which helped us in also understanding what other innovations were happening across the globe and network with other fellow innovators.

From a product development perspective, it was a goldmine. In 2013 came our first big achievement in terms of funding when 'International Finance Corporation' (A World Bank group) invested \$1.5 Million for Cleantech development. Being from a business family, it helped me in forging relationships very quickly

there, he developed many useful low-cost teaching/science teaching aids using locally available materials. The possibilities of using ordinary things for doing science and recycling modern junk into joyous products appealed immensely to children, his target audience. Arvind Gupta's first book, *Matchstick Models and other Science Experiments*, was translated into 12 Indian languages and sold more than half a million copies. Gupta has conducted workshops in over 2000 schools and has won many national and international awards.

Conclusion

These inventions have made a qualitative difference in the lives of the local communities. All these inventions were in direct answer to a felt need, which obviously wouldn't be addressed by formal channels. Indians are innovative, even in adverse circumstances. Rather, adversity brings out the best in us! ■



The writer is Assistant Editor, One India One People.

with our clients which going forward helped us in not just getting revenues, but also in product development. Clients suggested changes in not just how the product operates but also in pricing. We started getting featured in local and national newspapers for the innovative technology which we were using for enabling 'Demand Side Management' and providing 'Energy Intelligence' to customers. It has been nearly four years that we are in commercial operations and have been growing at a tremendous rate of over 100% every year. The high point of our existence came in the form of being adjudged by UNFCCC as a 'Lighthouse Activity' for 2014, for enabling an Information and Communication based solution to tackle Climate Change. Ban-Ki-Moon as well as Al-Gore were present at the event in COP 20, Lima, Peru, when we were acknowledged with the award.

There have been a lot of crests and troughs in our short existence of four years, but we intend to carry on innovating and changing the way the industries in a developing country operate by providing more Energy Intelligence using our 'Industrial Internet of Things' platform. We want to reduce costs and optimise the processes of our clients and become a one-stop-shop for all their energy requirements. With the growing competition in this field, and the bigger players moving in, we have managed to create a niche in the minds of our clients which helps further our cause of creating a world where every watt counts. ■



The writer is Director, Ecolibrium Energy, Ahmedabad.



VALLEY OF FLOWERS

a floral symphony

There are some places on earth which extract a toll from you if you want to inhabit it even briefly, fill your senses with the vistas it offers, take joy in its very sublime existence. One such place is the Valley of Flowers in Uttarakhand. A UNESCO World Heritage Site, there is no easy approach to this little paradise. It's a minimum three kilometre walk through rather tough terrain, which can shake one's resolve, but what it rewards you with is a majestic and complete feast for the senses. You will walk away from here feeling replete and truly blessed to have seen Mother Nature at her very best.

Text and photos: Gustasp & Jeroo Irani

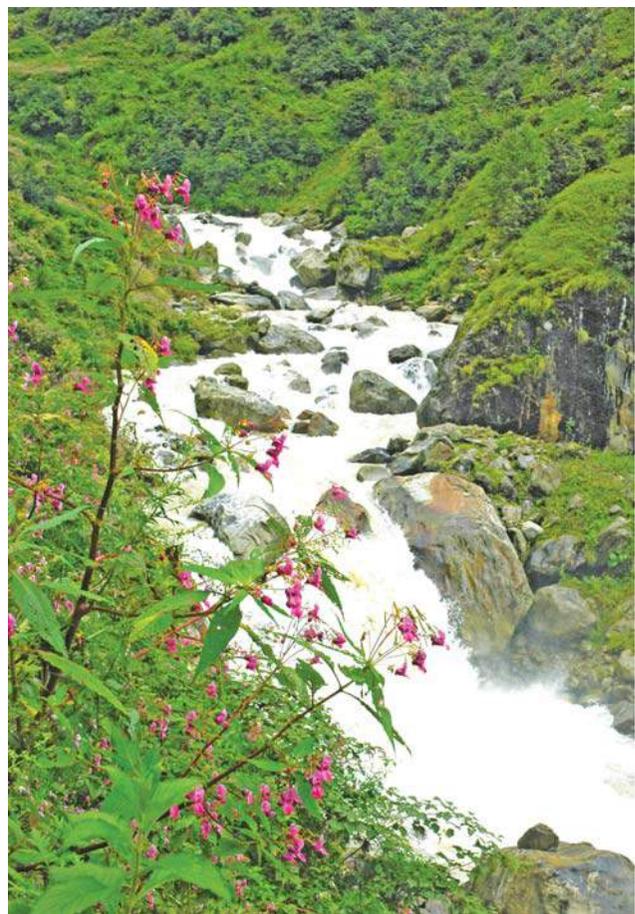


The Valley of Flowers – a flower lined trail

THE road to a paradise on earth, called the Valley of Flowers, in Uttarakhand, was paved with pain. The 13-km trekking trail coiled through some of the most spectacular mountain-scapes in India (make that the world). However, it was steep, narrow, largely unpaved and demanding. We had set out on foot from the little town of Govindghat on the Joshimath-Badrinath road with a spring in our step and a gurgling stream as our companion.

Within 10 minutes, the relentless climb up the rugged terrain started to take its toll. Ignoring the protests of our limbs and lungs, pampered and scarred with urban comforts and pollution, we pushed on. Another five minutes and we were drawing upon what seemed like our last reserves of strength and determination. We tried to distract ourselves by looking for photo ops – and there were umpteen – but even that became a futile exercise as perspiration seeped into the corners of our eyes and blurred our vision. Mechanically, we placed one foot in front of the other; it was important we did not give despair a chance to surface.

And then a miracle. Adrenalin kicked in and suddenly the mountains shed their threatening posture and even though the trail was as challenging as ever, we knew that the prize – The Valley – at the end would not slip from our grasp. We washed our eyes with fresh water from a mountain stream and the



A river coursing through the Valley

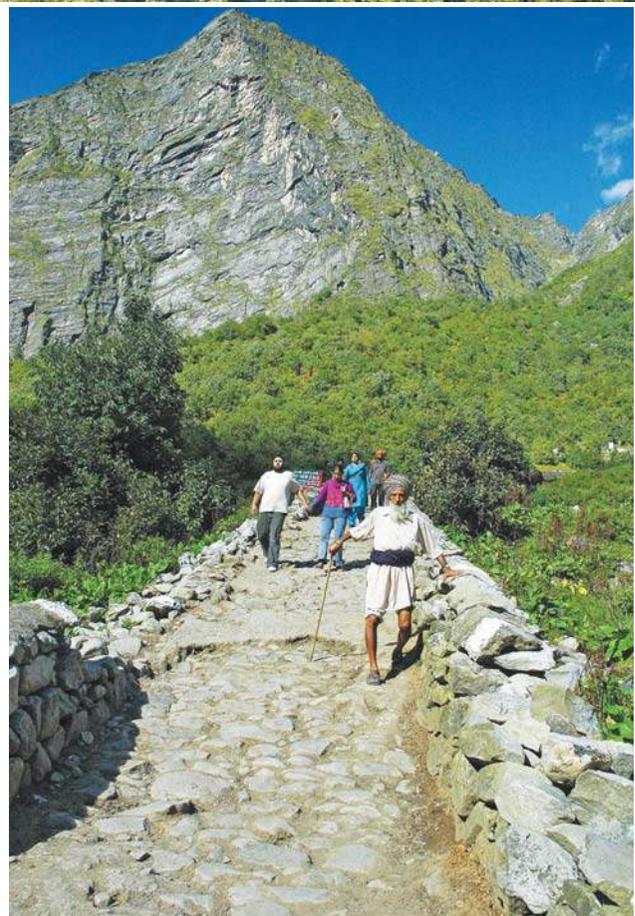


A glimpse of the Gangaria town

world around us was a beautiful place. Snow-draped Himalayan peaks flexed their bulging muscles against the backdrop of a blue horizon; a puff of cotton candy cloud rested against a forested slope before proceeding on its nomadic journey across the sky; a silvery river sliced through the green valley below us; waterfalls draped black cliffs with white curtains of cascading water; a wild flower wedged in a crack of rock glowed yellow... The valley, it seemed, had sent out a reception committee to welcome us.

Vaye Guru. We greeted fellow travellers and pilgrims on the trekking trail for the Valley shares these mountains with Hemkundsahab, the shrine of a revered Sikh Guru. They came in many *avatars*: turbaned men with flowing beards, some grey, others black; women in colourful *salwar kameezes*; rosy-cheeked kids. Families stopped by gurgling streams to rest and share picnic hampers. The faces of those trudging up with us were etched with determination. Those going down wore the serene look of people who have been blessed.

We bent down to take a photograph of a mountain goat and its frisky young lamb. However, when we stood up again our heads started to spin and we had to grab a wooden railing to keep our balance. "Don't let that stress you out. What you are experiencing is high altitude dizziness. Very common at these heights", an elderly Sardar reassured us with a pat on



The Hemkundsahab pilgrim trail



Berries, plants and flowers carpet the Valley

our shoulders. He was apparently speaking from experience as he has been traversing the Hemkundsahab pilgrim trail once every year for the last 20 years. "At these heights, you should avoid sudden movements; not push or exert yourself unduly and do things at a pace you are comfortable with," he added.

Good advice and we took it. In fact we needed it the longer we were on the trail and the higher we went. Sure, the scenery was mind blowing and beautiful, but the effort started to take its toll. The milestone said we still had three kilometres to go! Thankfully, the trail dipped, but the relief was brief and the

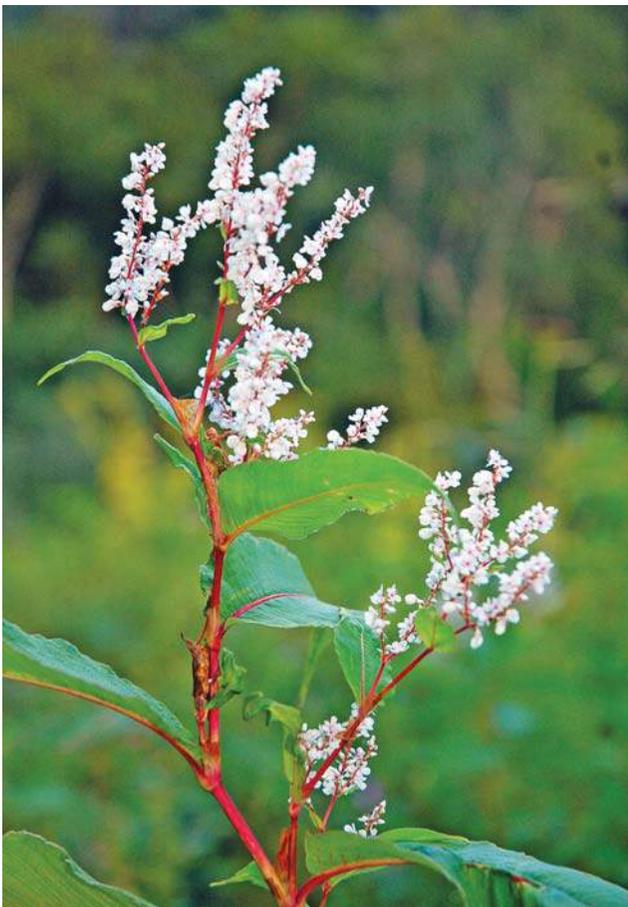


One of the many varieties of butterflies found in the Valley

last two kilometres was a steep ascent. The sight of a camp with flimsy tents (thankfully we did not choose this option) was a reassuring sight; it meant we were close to our destination.

The last stretch to Gangaria

Finally, some six hours after we had started out from Govindghat, we limped into Gangaria with a sense of relief. The valley was another three kilometres away and this little mountain village would be our base for the next two nights.



The Valley of Flowers in full bloom





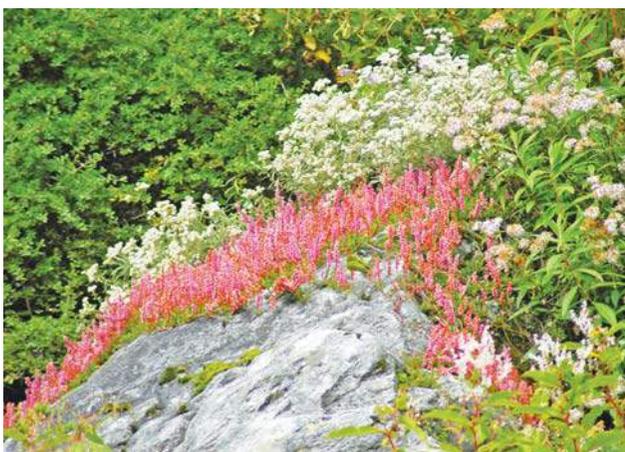
Bees and blossoms endemic to the Valley

After we had checked into the state-run lodge, showered and rested our weary limbs, we set off to explore the little village built around stone-paved streets that ran through it. Sadly, almost every second stone seemed to have been dislodged, making the simple act of walking a balancing act. We chose to view this as an advantage: since we had to keep looking down to see where our feet landed, we did not have to suffer the sight of the unplanned village; a jumble of buildings, restaurants, hotels, shops, stalls and garbage dumps.

That night we ignored the sound of rodents scurrying

between the ceiling and roof of our guest room and tucked ourselves into our beds for a well-earned sleep. Suddenly, the night exploded: flashes of lightning lit up the lawn outside our window and claps of thunder reverberated as they bounced off the sides of the surrounding mountains. Rain drummed on the roof above us. We found ourselves fretting: would the excursion to the Valley the next day prove to be a total washout? Then, despite our fretting, nature's fury and the gnawing of rodents, we fell into a deep sleep.

The gods smiled the next morning and greeted us with



Meadows painted with wild flowers

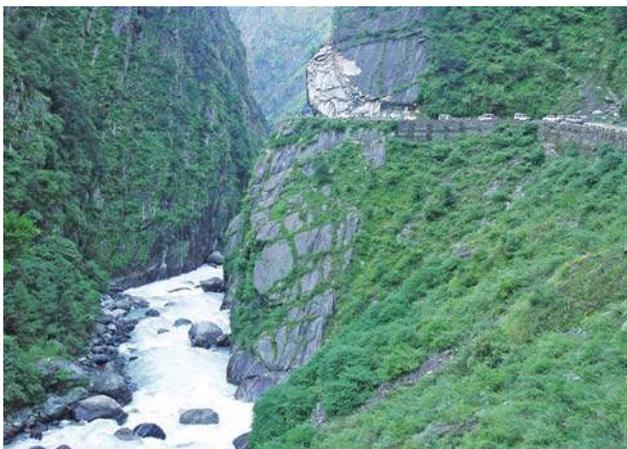
A waterfall along the pilgrim trail



The route sign at the Valley of Flowers

perfect weather; a deep blue sky dappled with puffs of white cloud. The manager of the lodge, who apparently knew the fickleness of the weather in the mountains, cautioned us not to get our hopes up too high. “The weather here is as fickle as the world of fashion: it can change on a whim and without giving you any notice.”

Taking his advice, we grabbed a quick breakfast and set off for the valley. The entry gate to paradise was located half a kilometre outside Gangaria. Looking down at the village from up there, we realised how one’s perception of a place can change when seen from a distance. From our height, the messy



A gurgling stream in the Valley of Flowers

little place looked like a cosy alpine village, nestled in the embrace of a towering pine forest.

With the last semblance of civilization behind us, we set off for paradise. We crossed a sturdy stone bridge that straddled a busy river and followed a narrow path that zigzagged up the face of the mountain. A signpost indicated that the valley was another two kilometres away but we felt like we had already arrived. As the trail snaked higher up the slopes, the forest cover started to thin out and trees finally gave way to meadows that were quite unlike any we had seen before. Surely this was the valley, but a marker on a rock indicated that our destination was still another kilometre away.

From there, the trail traced the banks of a sprightly young stream that bounded over rocks and obstacles as it tumbled through a green gorge painted with licks of colour: reds, yellows, purples...we gingerly stepped over a fragile makeshift bridge that straddled the playful stream and came upon a large signboard that welcomed us to the Valley of Flowers.

And we arrived at the Valley of Flowers

The map on the board showed trails that led through the UNESCO World Heritage Site but, quite honestly, we were in no hurry to go anywhere for we had already arrived.

It did not take us long to realise that to go to the valley



Misty mountain peaks on the way to the Valley of Flowers

looking only for flowers is like wearing blinkers, for nature blooms here in umpteen ways. It is a vast and diverse canvas of ever changing moods and textures. Droplets of water splashing into sparkling blue streams and rivers; waterfalls cascading down craggy cliffs; icicles hanging like stalactites from the mouth of rocky caverns; glaciers with a hint of blue raking the cleavage of mountains; mighty snow-draped peaks... and, of course, meadows painted with wild flowers.

It is also home to a variety of wildlife like deer and the rare and endangered snow leopard. The chance of spotting these elusive animals was slim at best, but just knowing that they had a home where civilization, as we humans define it, was an alien concept, was a reassuring thought. What we did get to see in abundance were a whole host of bees and insects including butterflies with rainbows on their wings. They had come to feast on the bounty of nectar that the valley laid out for them.

We had visited the valley in early September and though it was after the grand flush of colours that sweeps over it in July and August, we were nevertheless enveloped by a sense of all-pervading peace. A dew drop, quivering on the lip of a flower petal, glistened like a solitaire diamond. A bee hovered over a delicate purple flower before darting in to collect its nectar. And as the winged guest left to go and flirt with the next

bloom, the dew drop slid off and splashed into a sun kissed puddle. We thought we heard the flower, now relieved of its burden, sigh; a sigh that mingled with the buzzing of bees, whisper of the wind, the rustling of leaves... adding notes to the song of nature. We closed our eyes and listened to the happy gurgling of streams, the whisper of the wind, the laughter of distant waterfalls, the chirping of birds... beauty lay in the details that punctuated this extravagant landscape.

And all this was just one movement of nature's symphony; an opus that starts around March each year with the spring thaw when blood-red rhododendrons paint the valley in decisive colours. By May, the tempo eases and early blooms skip through the composition like flutes. With the coming of the rains in June, the tempo starts to pick up, building up to a grand crescendo of colours by July, a climax that is sustained by over 500 species of flowers working in harmony right through to August. Come September and the movement is soft and gentle once more and rust-red autumn leaves, berries and late autumn blooms add brushstrokes of colour to the Valley.

When we were there, the stage was set for the winter sonata as snow slipped down from the mountain peaks and cast an icy blanket over the Valley. The following spring, the Valley would wake from a deep slumber and burst into song once more. Each year the melody is the same but rendered

Hemkundsahab

On the banks of a mountain lake stands a sacred Sikh shrine that marks the place where Guru Govind Singh, the tenth and last Guru, surrendered his physical body and spirit to the Lord after prolonged meditation.

The site is also associated with Hindu mythology for it was here at Lokpal, as the place is otherwise known, that Lakshman (brother of Lord Ram) performed protracted penance. A small shrine commemorates his effort.

There is no accommodation for visitors at Hemkundsahab and visitors must return the same day to Gangaria (5 km away) which also serves as the base camp for the Valley of Flowers.



Badrinath

The abode of Lord Vishnu on the banks of the Alaknanda River is part of the holy Char Dham pilgrim circuit (the other three being Yamunotri, Gangotri and Kedarnath). Housed in the 15- meter high temple with a gilded dome is a black stone idol of Lord Vishnu sitting in a meditative pose.

Tapt Kund and Surya Kund are two hot springs that flow below the temple. A dip in these sulfurous waters (55 degrees C) refreshes the body and soul and is considered a must before one enters the main temple.

On a clear day one can see Neelkanth, a majestic Himalayan peak that towers 6,600 mts above sea level. Also worth seeing are the Vyas Gufa (a cave from where Sage Vyas is said to

have chronicled the epic Mahabharat, Ganesh Gufa (a small temple close to the cave where Lord Ganesh is said to have written the Mahabharat, Bhimpul (the source of River Saraswati) and Vasudhara waterfalls (the point from where the Pandava brothers along with their wife Draupadi began their journey to heaven) – which are linked with Hindu mythology and are a part of the Badrinath pilgrim circuit.

Finally, Mana Village (4 km) from Badrinath, inhabited by an Indo-Mongolian tribe, is the last Indian village before the Tibetan border.

Badrinath lies beyond Govindghat on the Joshimath-Badrinath mountain road.

Ananda in the Himalayas

The Valley of Flowers may be an uplifting experience but it can take a physical toll. Round off the adventure by checking in at the world's leading destination spa before stepping out to face the big bad world once more. Yes, this award-winning resort (it has been repeatedly voted the world's best a number of times in surveys conducted by leading travel publications), is the ideal way to top off the vacation.



Ananda in the Himalayas

ons in the region

Joshimath

This is the base town for the Valley of Flowers, Hemkundsahab and Badrinath. The town itself is congested and has little to offer but from here one can take a cable car up to the ski resort town of Auli and drive through the picturesque Tapovan Valley, where a hot spring hisses and spits out of a muddy outcrop.



Guru Shankaracharya's *Matt* in Joshimath

Rishikesh/Haridwar



Haridwar- Crowds gather for the Ganga aarti at Har-ki-Pauri

The two pilgrim towns are the launching pad of a Valley of Flowers adventure. It is here that the River Ganga leaves the mountains and enters the plains (according to mythology, it is here that her parents handed her over to her in-laws). The two towns brim with legends and spiritual energy. Attend a beautifully choreographed river *aarti* at the Parmath Ashram in Rishikesh, take a holy dip at the Har-ki-Pairi in Haridwar, attend a yoga class...instant nirvana may be lurking behind the next corner. A glutton for thrills? Go river rafting, trek, rappel...

Rajaji National Park

A wildlife safari goes well with back-to-nature-adventure and the Rajaji National Park near Rishikesh is an exciting option. Here you get to say hello to elephants, deers, jackals, wild boar... maybe even a tiger.



Rajaji National Park - safari jeeps parked outside the entrance of the park



A deer at the Rajaji National Park



A majestic tusker



Snow-draped Himalayan peaks

with a stunningly original and different interpretation.

As mist started to tumble down the slopes in front of us, we sensed that the weather was about to change and it was time to leave paradise. On the trek back to Gangaria and civilisation, we joined the stream of pilgrims returning from the holy shrine at Hemkundsahab. Most had the serene look of those who had been blessed by divinity. We probably wore a similar look, the only difference being that our *guruji* was Mother Nature whose ingenious outpourings found sublime expression in the many altars that studded her cathedral: the Valley of Flowers.

Fact file

The Valley of Flowers is an UNESCO World Heritage Site.

The valley is open to the public from around April when winter frees it from its icy embrace and remains open for six to seven months up to September/October. The Valley starts to bloom with the coming of the rains in mid June and is at its colourful best during the months of July and August.

The entrance of the Valley is located 3 km from the town of Gangaria, which is another 13 km trek from Govindghat on the Joshimath-Badrinath mountain road. There is an option to ride a pony up to Gangaria. These animals, however, are not allowed beyond this point and the only way to cover the last segment is on foot. An overnight stay at Gangaria is a must to visit the valley.

Tip: Plan to spend two nights in Gangaria for if the first day

is rained out, then you can visit the valley on the second day. And if the weather is fine, visit Hemkundsahab the following day.

The closest airport is at Delhi from where one can drive down to Joshimath, via Rishikesh / Haridwar in the north-eastern reaches of Uttarakhand.

Alternatively, you can take a train from Delhi to Haridwar and drive from there to Joshimath where Leisure Hotels (www.leisurehotels.co.in) has a luxury tented camp.

The Garhwal Mandal Vikas Nigam (GMVN), an arm of Uttarakhand Tourism, also has a number of tourist lodges and guest houses in the area including one at Gangaria. For more information visit Uttarakhand Tourism Development Board at: www.uttarakhandtourism.gov.in ■

Gustasp and Jeroo Irani are travel companions for whom life is a never-ending journey. Over the last 25 years they have travelled extensively across India and the globe, taking the rough with the smooth; sampling different cultures and cuisines. In the process they have trekked in the Australian Outback, slurped snake soup in Hong Kong, have danced with the Samburus in Africa,



stayed with a local family in a Malay village, cracked the Da Vinci Code in Paris... For them, writing and photography are more than just freezing moments of that journey; it's a passion.



Text and Photos: Disha Shetty

The Sandakphu-Gurdum trek in the Himalayas is one of the simplest and most diverse trek routes in the mighty Himalayas. The flora and fauna one encounters, along with that tantalising glimpse of Mt. Everest and Kanchenjunga, make it a truly memorable experience, says Disha Shetty.

TREKKING to Himalayas? Are you sure you can do it? Don't you need to undergo extensive physical training before doing so? These and many more questions came my way when I first pitched the idea about my Himalayan trek. The organisers of the trek assured me that as long as I was physically fit, I could complete the Sandakphu - Gurdum trek that I had signed up for. The trek incidentally was also called a 'ladies trek' by one of the camp leaders we came across later, who said that it was one of the easiest of all the Himalayan treks and hence the best one to start with.

It is also one of the most scenic ones as the trek route takes you from the cold hilly areas of Tumbling and Kalipokhri in Nepal to Sandakphu, from where on a sunny day you can see both the snow covered Mt Everest and Kanchenjunga. The trek route to Gurdum goes through a forest that is covered with blooming flowers in the month of April and May; they seem to give you a warm welcome. A part of the route goes through Singalila National Park in the northern part of West Bengal, and if you are lucky you might just spot a red panda or two while on your way.

I did my trek with the Youth Hostel Association of India

that offers a range of treks at extremely economical prices. Our reporting base camp was in Darjeeling which can be reached either by taking a private transport from the nearest Bagdogra airport or a train from Kolkata to the New Jalpaiguri railway station, and then a bus or private transport to the beautiful, fog covered hill station of Darjeeling.

Unpredictable Himalayan weather

The trek is best done in summers as the temperatures in most places would remain between 0-10 degrees. Backpack with a first aid kit, lots of warm clothes, gloves and raincoat are a must before you embark on the trek. You cannot carry a trolley or any other kind of bag as your hands need to be free as you trek. While summers might mean soaring temperatures for the rest of the country, in the Himalayas it simply means that on some days you might be able to walk around with just two layers of clothing. If you have never seen snowfall, you might just get lucky as the raindrops suddenly turn into small snowflakes here.

The weather in Himalayas is very unpredictable. One moment you might feel the need to remove your woolen clothing and in the very next, seemingly out of nowhere, fog covers the area and



On a clear day, one can see Kanchenjunga from Sandakphu

your fingers go numb. All this happens in a matter of seconds and you suddenly find yourself frantically reaching out for warm clothes.

Get, set, trek!

Our Himalayan trek began at Dhotrey, an area close to the West Bengal-Nepal border. We were told that two of our camps, where we would spend our nights after an entire day of trekking, would be in Nepal – Tumbling and Kalipokhri, while two others – Sandakphu and Gurdum – would be on the Indian side. During the trek we were moving in and out of Nepal, all without any hassles, making it easily one of India's friendliest borders. The trek route passes through the Singalila National Park and if you are lucky you will spot a red panda, like we did, as it slept peacefully on one of the branches of the lush green trees that surrounded both sides of the trek route.

Colourful butterflies, a variety of birds and flaming pink rhododendrons make the trek route a nature lover's paradise.

The trek from Dhotrey to Tumbling in Nepal has trekkers walking amidst towering mountains and pristine greenery. The fog flits in and out, enveloping the mountains in an instant and clearing out to leave us spellbound with the sight of the mighty Himalayas. At Tumbling the temperatures began to fall. Several village homes are built right on the India-Nepal border. Some homes are on the Indian side while others on the Nepali side. The homestays serve simple but delicious food with potatoes and cauliflower the only

two vegetables that we ate throughout our journey. Variety is not one of the specialities of a high altitude diet!

From Tumbling we trekked higher to Kalipokhri. Here there is a water body with dark inky water which almost looks black. Hence the name 'kali' which means black in Hindi. At Kalipokhri, Himalyan yaks will make an appearance along with domesticated cows. One can even spot eagles soaring high, looking majestic against the backdrop of the rocky mountains.

Life without thick woolen caps and even thicker gloves becomes difficult here as the cold Himalayan winds blow



A river meanders its way across the verdant landscape

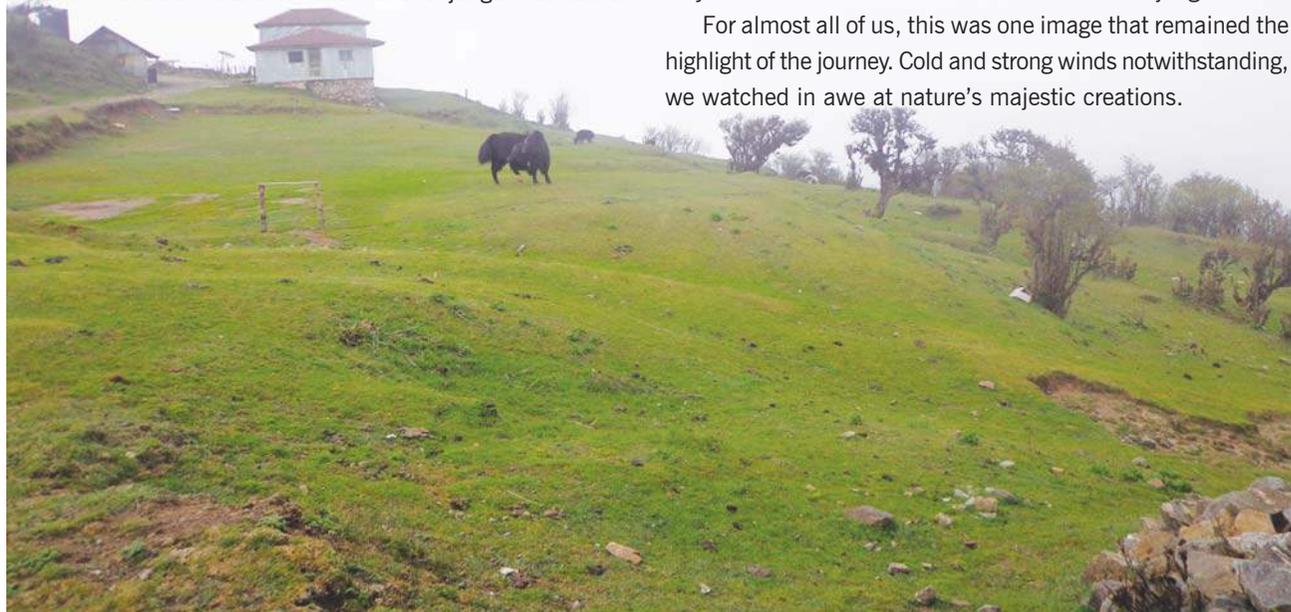


Fog flits in an out in a matter of seconds, causing temperature variations. One moment you are warm and the next you cannot feel your fingers anymore!

strong. The view of the surrounding mountains and the greenery below continues to get more stunning with each step into the higher altitudes.

Face to face with the mighty Everest

We next headed to the highlight of our trek - Sandakphu, the place from where on a sunny day one can get a clear view of the snow covered Mt Everest and Kanchenjunga mountains.



At Kalipokhri, the Himalayan yak made an appearance

While the uphill trek is arduous, we woke up at the crack of the dawn to watch the sight we had trekked all this distance for. Our group which had 25 other enthusiastic trekkers from different states of the country couldn't hide their excitement when the fog cleared and the snow covered peaks made an appearance. Temperatures were sub-zero, the wind so strong that even the well built found themselves swaying, and yet, all of us had eyes only for the mountains – Mt Everest and Kanchenjunga.

For almost all of us, this was one image that remained the highlight of the journey. Cold and strong winds notwithstanding, we watched in awe at nature's majestic creations.



Streams flowing down straight from the Himalayas are a delight for the trekkers

Trekking down

If mountains dominated our route while trekking up, it was time for the Himalayan forests to entice us with flaming pink rhododendrons and a carpet of thick green moss. The landscape on the way to our next halt in Gurdum was a treat to our eyes as butterflies flitted among the multi-covered flowers and lush green forests welcomed us.

While trekking down appears relatively easy compared to the ascent, it is hard on the joints and a majority of those in our group ended up with injuries during this leg of the trek.

The almost 14 km trek down ended at Gurdum, which has quaint villages nestled in the luscious Himalayan landscape. We spent the second last night of our trek at a homestay here which was surrounded by pretty potted plants with seasonal flowers. Temperatures now were fairly warm and the gloves and woollens were no longer needed.

Last day of the trek

Our last halt was at Rimbik in the Darjeeling district, which required us to trek further down from Rimbik. As we walked, our ears picked up the sound of flowing water. We strained our eyes to see clear, cold water gushing down the mountain in a stream and in an instant all our faces lit up. Not ones to miss the fun, our group plonked itself near one such stream, stopping for some pictures and gulps of the pristine white water.



Homestays and local homes have a variety of potted plants all year long - a visual delight for the visitors as well

As we walked further, we passed several more villages and the terrain changed to motorable roads. Small cozy homes dotted the landscape and markets that closed by six in the evening made an appearance. The place seemed to slowly nudge us to get used to city life again, with the beautiful journey that we had just undertaken, settling down as a cherished memory in our minds.

What more at Darjeeling?

From Rimbik we were brought back to our base camp in Darjeeling in a private vehicle. It would be a good idea to stay back at the hill station for a day or two more as there is plenty to explore from its vast tea gardens to the Japanese temple. You can even try your hand at rock climbing and for those interested in history of mountaineering, the Himalayan Mountaineering Institute is a must see. Gangtok too is merely

at a distance of five hours and is recommended for those who have not yet had their fill of the mighty Himalayas. ■



The writer is a young journalist who has recently discovered the joys of travelling.

Our Last Six Issues

To order copies Call: 022-23534400 / E-mail: oiopfoundation@gmail.com / oiop@vsnl.net

<p>Oceans</p>	<p>Prison</p>	<p>Indian Railways</p>	<p>The Northeast</p>	<p>The Northeast</p>	<p>Music</p>
---------------	---------------	------------------------	----------------------	----------------------	--------------

One India One People Club activities in Mumbai

'Emotional Transformation' Workshops by Chinmaya Mission



Sadhana Vidyalaya (English Medium), Sion



Sadhana Vidyalaya (Marathi Medium), Sion



Chandrabhan Sharma College,
Powai Vihar Complex



Chandrabhan Sharma College (Jr. College)
Powai Vihar Complex



V.P. M. Junior College, Mulund



Vivek Vidyalaya Junior College, Goregaon



Jnana Sarita High School & Jr.College
Mulund



Shri V.C. Gurukul High School, Ghatkopar



Holy Angels' School, Dombivli



VPM's B.R. TOL English High School,
Mulund



VPM's R.Z. Shah College of Arts, Science
& Commerce, Mulund



Dr. Antonio Da Silva School & Jr. College,
Dadar

One India One People Club activities in Mumbai

Disaster Management Workshop by Mr. A. Gopalakrishnan, Resource person for OIOP



VPM's B.R. TOL English High School
Mulund



I B Patel Vidyalaya, Goregaon



V.P. M. Kannada High School, Mulund



V.P. M. Junior College, Mulund



Matunga Pioneer Jr. College, Matunga



Shree Chandulal Nanavati Vinaymandir,
Vile Parle



Jnana Sarita High School & Jr.College,
Mulund



Shri V.C. Gurukul High School,
Ghatkopar



Holy Angels' School, Dombivli



Chandrabhan Sharma College (Jr. College),
Powai Vihar Complex



VPM's RZ Shah College, Mulund



Dr. Antonio Da Silva School & Jr. College,
Dadar

“The UDF government that assumed power in 2001, went ahead to systematically destroy the PPC, from which it has not recovered as yet”

Prof. K.N. Ganesh has been associated with KSSP (Kerala Sastra Sahitya Parishad) from 1984. It is a People’s Science Movement in Kerala. He has been the State Executive Committee member from 1989 and was the State President during 2005-7. Founded in 1962, the organisation started work with about 40 members as an organisation of science writers in Malayalam. Over the past four decades, it has grown into a mass movement with a membership of over 40,000 distributed in more than 2000 units spread all over Kerala. Prof. Ganesh talks to **Anuradha Kalhan** about the unique role KSSP has played in Kerala’s social and cultural development.



What is the organisational structure and purpose of KSSP?

KSSP is functioning as a mass democratic organisation with a state leadership, district, area committees and local units. In order to focus upon the various activities of the KSSP, we have formed subject committees, which plan and execute various activities in that particular field. At present there are subject committees for environment, education, gender, development, health, scientific awareness, youth affairs and publication. Science for social revolution has been the slogan of KSSP for about four decades, and we work towards the dissemination of scientific temper among the people and intervening social issues related to science and technology.

What kind of people are members in terms of gender, education, occupation?

Generally, it is an organisation of middle class employees, school and college teachers and those laymen who are interested in science issues. We have been attempting to contact professional scientists and their institutes and involve them in our activities, with varying success. The gender component was marginal in the beginning, but recently the membership of women has risen to about 10% of the total membership. We are aware of this lacuna and are trying to involve more women as members and activists.

What drives people to volunteer for this organisation?

Most of the activists are attracted by our work in the various subject committees and some of them are also attracted by our campaigns through magazines, published works and art programmes (*kala jathas*). A number of young people have been joining our organisation who had earlier got introduced to our forum for children (*balavedi*). The most important inducement for joining our organisation has been the major socio-political campaigns undertaken by us in the fields of environment, literacy and the People's Plan Campaign (PPC).

In what ways is KSSP different from the usual NGO?

KSSP has been functioning as a mass organisation, maintaining a liberal, democratic character. People belonging to different political parties and organisations, and some without any direct political affiliations have been our members. However, it is undeniable that on the whole, the organisation has acquired a broadly Left and democratic profile. The organisation has raised its own funds through selling our publications, products (such as the soap and hotbox) and magazines, and used government funds or funds distributed by acknowledged national research institutions for the institutional project of IRTC (Integrated Rural Technology Centre at Palghat). The organisation has not so far received any funds from acknowledged foreign funding agencies nor is it associated with religious or community organisations believed to be receiving foreign funds.

What are your most cherished memories as a member and as a leader?

Perhaps, the most cherished memory was the campaign that we undertook in the wake of the Bhopal gas massacre of 1984, a campaign that involved questions of environment, human rights and fight against multinationals, and assumed the concrete form of the boycott of Eveready battery. The campaign culminated in 'science trains' run from different parts of India to Bhopal and a massive rally in front of the site of the massacre. The message of the campaign is still alive as the gas victims are still fighting for the compensation to which they are legally entitled. The enthusiasm shown by KSSP activists in the rehabilitation of the Tsunami victims in Kerala, along with a major science awareness programme throughout Coastal Kerala is another cherished memory.

Can you give us an account of the years leading up to the famous Peoples Plan Campaign of 1996?

PPC has a long historical background. Ever since the formation of Kerala state, it was realised that Kerala's substantial biodiversity, including oceanic wealth and agro-based enterprises, was going to be a major resource for development projects, which had to be tapped locally. Hence, the Left

party in Kerala had in general been arguing for decentralised planning, which had drawn the support of liberal minded economists also (like K. N. Raj). The proposal made some headway during the 1987-91 LDF (Left Democratic Front) government, when District Councils were formed. KSSP intervened in the process by initiating Panchayat level resource mapping project. After the introduction of the Panchayati-Raj-Nagarpalika Bills in 1994, KSSP took another initiative by submitting proposals for the preparation of comprehensive Panchayat level development (a research proposal submitted to Kerala Research Project for Local Level Development, operated by the Centre for Development Studies, Thiruvananthapuram). The experience gained in resource mapping and the KSSP project facilitated the formulation of the PPC, which was undertaken by the Government of Kerala (under LDF) during 1996-2001. In the final form, PPC also drew its inspiration from the famous participatory budgeting project at Porto Allegre, Brazil.

The response of the people towards the PPC was overwhelming during its early phase. It is possible that the people were expressing their dissatisfaction towards the tardiness and corruption in the implementation of government schemes, and were exploring opportunities to create new people-oriented projects. The atmosphere was also set by the repeated campaigns in support of 'the power to the people' initiated in particular by the KSSP. The positive atmosphere that had set in after the implementation of the Panchayatiraj-Nagarpalika bills also facilitated PPC. However, the implementation soon ran into problems, initially through opposition by the Line Departments, who believed that their own rights and privileges were encroached upon, and later through shifts in the perspectives of the Panchayat bodies themselves. Investment in the primary sector (in particular agriculture, small industry, and the like) declined, and building, construction, distribution of amenities etc, began to assume importance in the Plan implementation. The earlier practice of appointment of people's committees for Plan implementation was replaced by widespread sub-contracting. However, legislative and administrative reforms and empowerment of the people could have solved these issues. The UDF government that assumed power in 2001, went ahead to systematically destroy the PPC, from which it has not recovered as yet.

What happened to Gender Budgeting that was a part of PPC?

Gender Budgeting was introduced under PPC as a part of the Women's Component Plan, whose funds had been transferred to the LSGIs (Local Self Government Institutions). A number of projects for the empowerment of women had been submitted by most of the Panchayats. Self-Help Groups (SHGs) and producer's collectives were also being formed, and the

Community Development Society (called Kudumbasree, Kerala's Poverty Eradication Mission) was also formed in the process. However, gender budgeting was virtually given up by the later governments, except by the 2006-11 LDF government, when a major initiative was undertaken in the 2009-11 phase. Kudumbasree has evolved as an autonomous self-help agency supported by the Government of Kerala. Over the years it has developed its own independent structure also supported by the Panchayats. KSSP activists have been involved in the state level organisation of the Kudumbasree, in which they continue to function even now.

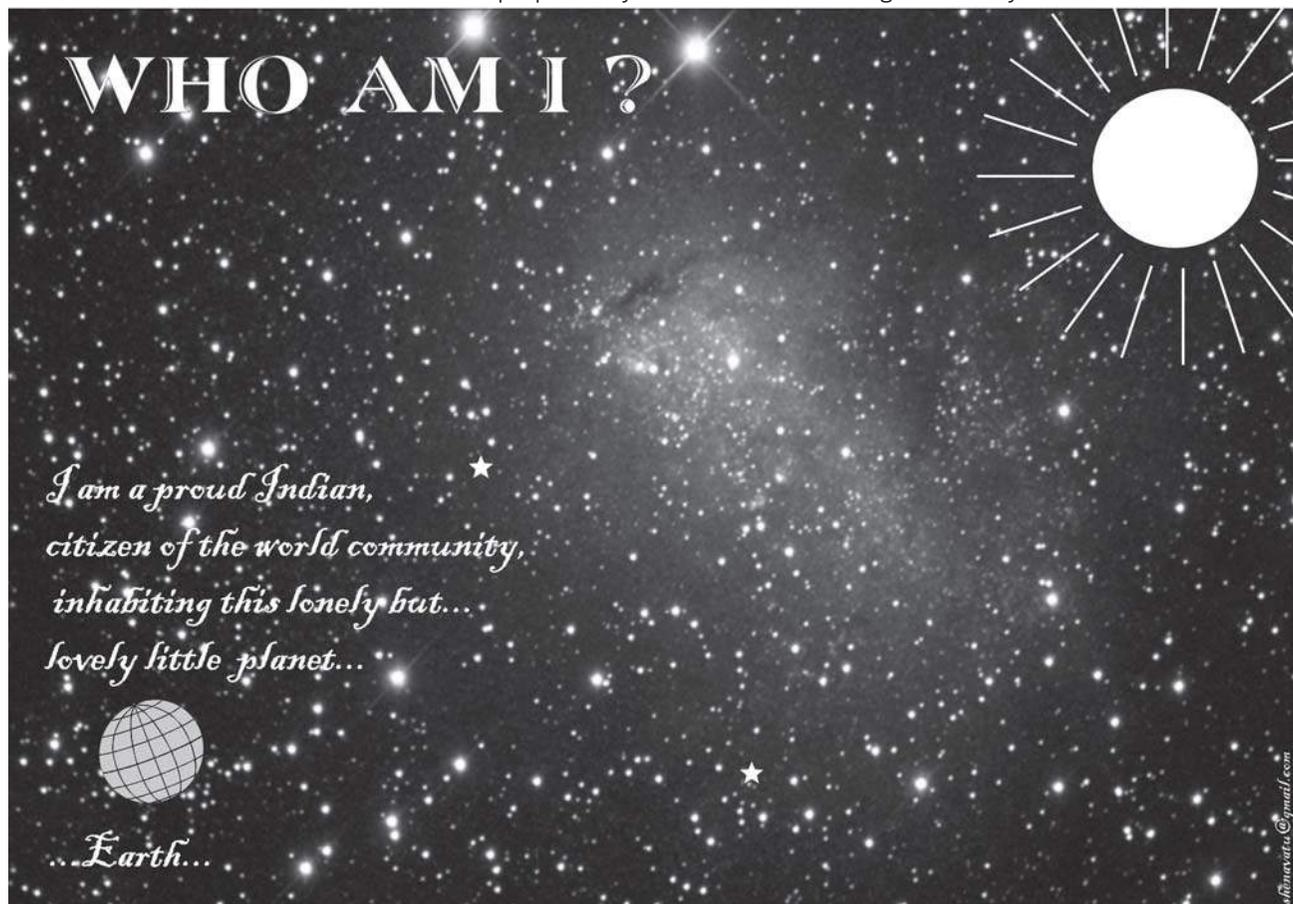
What is the role of such an organisation in shaping the culture and stimulating rational thought in society?

KSSP along with other PSMs have to play an important role today. On the one hand, we have scientism, which today means a simplistic faith in the ability of techno-science as the panacea for all ills gripping the society, and on the other we have anti-scientism, which rejects every scientific and rational thought and wants to bring in a neo-medieval society. The first group have their champions in the market forces, and the latter have their spokesmen in community identity politics, of both the majority and the minority. In this context, it is importance of science as an ecumenical, rational body of social knowledge, which should become the common sense of the people of any

developing society. Any defense of rationality would imply fighting the 'irrational anti-people' uses of science also. Hence there is an objective need for a science movement in the country, a role that today's PSMs, including KSSP are trying to fulfill.

What has been its role in shaping the culture of Kerala?

When KSSP was formed in 1962, the secular and democratic cultural processes were dominant in Kerala, and KSSP activists believed that their duty was to infuse scientific content into it, that is bringing science into society. Even the slogan 'science for social revolution' was coined in this spirit. During the subsequent decades, the scenario has changed; science is seen as an instrumental necessity for the new generations to succeed in the market economy, the space for scientific consciousness or a rational outlook being subverted by religion and caste. The current dominance of the market forces and communal ideology has resulted in the undermining of secular, democratic politics and culture. In this context, the task of PSMs is not only to inculcate science, but entire tenets of scientific rationality and democratic consciousness among people. Science and culture are no longer two provinces of human life, but aspects of the same material culture that facilitates social transformation. Building a democratic, secular, material culture becomes an urgent task of all science movements including KSSP today. ■



Northeast's disputed lines

*India's Northeast region which is racked by insurgencies, has also faced inter-state border disputes since the last many decades. The genesis of the disputes lies in the bifurcation of the state of Assam says **Tulika Sarmah**, as she examines the issue and what needs to be done.*

- To a question on the issue of border rows in the Northeast, the Minister of State for Home Affairs Kiren Rijiju, an MP (Member of Parliament) from the Northeastern state of Arunachal Pradesh, replied on the floor of the Rajya Sabha (the Upper House of the Indian Parliament) that seven incidents of violence in the year 2014 took place along the disputed Assam-Nagaland border areas, mainly Uriamghat area of Golaghat district in Assam, resulting in loss of twelve lives. In August 2014, over 200 houses were set ablaze and more than 10,000 people took refuge in twelve relief camps set up by the Assam Government after miscreants from across the interstate border went on a killing spree. Later, the issue snowballed into 'road blockade' and 'economic blockade' against Nagaland as all the essential supplies to the state goes through Assam. The peaceful agitation ended on a sour note after police resorted to firing on the protestors killing four people instantly.
- On 29 January 2014, a group of armed assailants, allegedly on the behest of a member of the Legislative Assembly of Arunachal Pradesh and local administration, crossed over to Chauldhuwa, a border village in Behali Reserve Forest in Sonitpur district of northern Assam and killed as many as 10 people.
- In May-June 2008, some incidents took place along the Assam-Meghalaya border following the



Army stages a Flag March on August 21 2014, in Golaghat town, after violence shook the Assam-Nagaland border

Assam government's attempt to lay a foundation stone for a primary health sub-centre at Langpih, a border village claimed by both Assam and Meghalaya. Both state governments set up a high level co-ordination committee to examine the disputed areas. There is no breakthrough till date and a status quo is maintained.

- On 28 April 2005, an MP from Assam Sarbananda Sonowal (currently Union Minister of Youth Affairs and Sports) raised another aspect of the disputes on the floor of the Lok Sabha (the Lower House of Indian Parliament). While welcoming the peace process between the Government of India and the Naga secessionist outfits,

he said that the latter proposed the formation of Nagalim (greater Nagaland) claiming vast areas of Assam, Arunachal Pradesh and Manipur. The proposal itself created unrest and misunderstanding as these states had resolved not to concede any land to the proposed Nagalim.

Assam – the common factor

The facts cited above show that Assam is the common strand that connects all the border disputes in the Northeast. Other states in the region are also embroiled in similar disputes which often turn violent. The longest and bloodiest of these is the row between Assam and Nagaland, which began right from the inception of Nagaland state in

1963. The Nagaland State Act of 1962 had defined its borders according to the 1925 notification when Naga Hills and Tuensang Area were integrated into a new administrative unit and made an autonomous area. Nagas, however, did not accept the boundary delineation and demanded that Nagaland should comprise the erstwhile Naga Hills and all Naga-dominated areas in North Cachar and Nagaon districts of Assam, which were part of Naga territory according to an earlier notification of 1866. Tensions soon flared up resulting in the first border clashes in 1965 at Kakodonga Reserve Forest in Golaghat district of Assam. Since then, violent clashes along the Assam-Nagaland border have become a regular feature, with major armed conflicts reported in 1968, 1979, 1985, 2007 and so on. In January 1979 and in June 1985, Naga militants allegedly with support from the Nagaland police killed nearly 100 people including Assam police personnel in Golaghat district.

The border problem between Assam and Meghalaya has persisted for decades now. It first started when Meghalaya challenged the Assam Reorganisation Act of 1971, which bestowed Blocks I and II of the Mikir Hills to Assam (presently the Karbi Anglong district). Meghalaya contends that both these blocks formed part of the erstwhile United Khasi and Jaintia Hills when it was created in 1835. At present there are 12 points of dispute along the Assam-Meghalaya border.

After the formation of the states of Arunachal Pradesh and Mizoram, both accepted their notified borders with Assam, but later on started raising the issue of encroachment leading to border clashes. Clashes along the Assam-Arunachal Pradesh border were first reported in 1992 when the Arunachal state government alleged that people from Assam are building houses, markets and even police stations on its

territory. Since then intermittent clashes have been taking place making the border tense. In 2005, during an eviction drive by the Assam government, some 100 houses in East Kameng district of Arunachal Pradesh were

allegedly set ablaze by the Assam police and forest officials. Again in 2007, tensions flared up along the Assam-Arunachal border when villagers from across the border fired at a peace meeting in Assam injuring eight people.

The Assam-Mizoram border, on the other hand, has remained relatively calm despite the disputed nature of the border. It was due to the timely intervention by the central government that a major crisis was averted and the situation was quickly brought under control in 1994. Following another border incident in 2007, Mizoram declared the present boundary with Assam unacceptable, claiming that the inner line of the Inner Line Reserved Forest as described in the 1875 notification under the East Bengal Frontier Regulation of 1873, should be the basis for delineating the border.

The genesis of the border disputes

The root cause of all these interstate border disputes can be traced back to the decision to carve out new political entities out of Assam. In the backdrop of the 1962 border war with China and surfacing of numerous ethnic insurgencies in the Northeast, the Government of India decided to carve out new political entities, with the dual aim of consolidating its hold over the region as well as to fulfill the aspirations



Huts torched near Behali along the Assam-Arunachal border on January 29 2014

of various ethnic communities involved in separatist movements. Thus, the reorganisation of Arunachal Pradesh into a Union Territory in 1972 and its upgradation to full-fledged statehood in 1987 can be seen as a strategy of the Indian government to consolidate its position vis-à-vis China in the border negotiations.

Similarly, the granting of statehood to Nagaland in 1963, Meghalaya in 1972 and Mizoram in 1987 were steps to accommodate the territorial aspirations of the major tribes of these states namely, Nagas, Khasis, Garos and Mizos. However, the freshly created state boundaries did not strictly conform to the ethnic boundaries of the region. The sizeable populations of Mizos and Nagas in the North Cachar Hills (now Dima Hasao) and Cachar districts made it possible for both Mizoram and Nagaland to claim territories in Assam.

In the face of mounted tensions and failure of the state governments, the Supreme Court had instructed the central government to constitute a boundary commission in 2005. The two commissions constituted by the Centre earlier, the Sundaram Commission (1971) and the Shastri Commission (1985) to settle the Assam-Nagaland border dispute failed to resolve the matter as Nagaland rejected the

recommendations of both these panels. Over 60,000 hectares of Assam forest land has been reportedly under the occupation of Nagaland where schools, health centres, churches and other facilities have sprung up with the direct help of the Nagaland government.

Needless to say, a quick and speedy resolution of these border issues has become necessary given the central government's renewed emphasis on the overall development of the Northeast. On the other hand, a holistic approach for development of the border areas is a must. But solution of the vexed problem is a huge challenge, as owing to the proximity to international borders (a vulnerability of the Northeast arises from its geo-political positioning, bound as it is by China, Bangladesh, Bhutan, Myanmar and Nepal) not far away from the infamous Golden Triangle of illegal arms hub in South East Asia – all kinds

of sophisticated weaponry land easily at the hands of insurgents and miscreants in the region. It is one of the reasons of prolonged violence of all hues in the region. Needless to say that many of the militant groups of the Northeast have turned mercenaries and insurgency movements have become criminalised.

Notably with rich tea plantations in Assam, the tea gardens along the border have become sites of conflict in recent times. The intruders from across the borders are frequently ransacking these tea plantations, especially the newly emerging small plantations. It is understandable that a new generation of Nagas want to begin tea plantations for which a vast amount of land is required, which is available only in the foothill border.

The interstate border disputes in the Northeast showcases the failure of the country's existing policy

framework for the uplift of economically backward and isolated regions. Even the paramilitary forces deployed in the concerned areas failed to maintain their expected neutrality. It is time the Centre took a bold initiative to facilitate a fair settlement of the festering border problems rather than paying lip service to the much-promised development of the region. ■

The writer is a freelance journalist based in Guwahati. A post-graduate in Economics, she specialises as an economic and political analyst for both print and electronic media. She has made a number of documentaries on current affairs for Doordarshan. She



has four books to her credit, three poetry collections and a translation of legendary artist Marc Chagall's autobiography into Assamese.



**WORLD CLASS
QUALITY MEDICINES
AT AFFORDABLE PRICES**

BLUE CROSS LABORATORIES PVT LTD.
PENINSULA CHAMBERS, LOWER PAREL, MUMBAI - 400 013,
INDIA.

Stop the division - now!

India has seen much reorganisation of its internal borders, though fresh demands are being made for further divisions. It is time to arrive at a consensus and rule out any more carving out of states, asserts V. Pramod.

INDIA has undergone a lot of transition since the days of Independence. Territories have been reorganised to form linguistic states. However, disputes still fester over issues of separation of territory, either due to demands for new states or calls for addition of new territories after separating them from other states, like Maharashtra's demand for Belgaum from Karnataka. One also comes across calls for Kasaragod's merger with Karnataka. It would be best for the country to evolve a consensus, ruling out separation of territory with regard to linguistic states (those formed on linguistic basis) or those identified as such or those with a certain identity of their own. Such a political consensus would certainly go a great way in fostering harmony in the country.

It's argued that states can be better administered if they are smaller and more compact in size, which cannot be faulted. However, we have to take factors into consideration such as the emotions among people. Our countrymen have already witnessed the acrimonious division of Andhra Pradesh into two states. States are being demanded for problems that are not intractable. Voices from Vidarbha in Maharashtra have called for separation, as the perception prevails that the region has been ignored with regard to development. Though the region accounts for a large quantity of the state's electricity, it has been reeling under severe power shortage. Drought has also harmed the region. It's being felt that western Maharashtra is drawing more attention. It would be better to address the region's concerns by chalking

out a comprehensive development plan, rather than separating territory to form a new state. There are also people who try to point out features distinguishing the region from the rest of Maharashtra. Whatever the distinctiveness, if people speaking the same language cannot stay together, it portends disaster for the country's unity. Any division of the state would send out wrong signals, making it imperative that it stay united.

Demand for new states along identity and administrative lines

The demand for Gorkhaland is quite strange. Here, it is being stated that the Gorkhas demand separation from West Bengal due to their distinctive identity, i.e., that they want to be recognised as Indians. The proponents also argue that Gorkhas are often questioned about their Indian identity wherever they travel, which upsets them. Apart from this, the region has experienced inadequate development. Though one cannot deny that it's a genuine cause for anger, the same cannot be used as a pretext for a separate state. Bengalis have considered themselves as one people due to their language and customs from a long time. They would certainly not be happy if the state was divided, despite the distinctiveness of Gorkha majority areas. If the arrangements that came about later like the Gorkha Hill Council and the Gorkhaland Territorial Administration had been put in place earlier, the demand for a separate state would not have been put forth in the first place.

However, states that have not been

formed on linguistic basis or those without a predominant identity of their own such as Uttar Pradesh (UP), Madhya Pradesh etc., can certainly be divided. It cannot be denied that governance of UP is an arduous task, given its huge population. As the division would be on purely administrative grounds rather than ethnic, linguistic or cultural factors, it's expected that there would not be much pressure against such a move. Though its division would help administrative convenience, certain factors have to be taken into consideration like the viability of the new states to be formed and equitable distribution of resources. Unless all these factors are meticulously planned, we cannot expect the exercise to be a smooth affair. Here, one is reminded of the earlier bifurcation of Uttar Pradesh, leading to the formation of Uttaranchal (later Uttarakhand). Jharkhand was carved out of Bihar and Chhattisgarh was formed after bifurcating Madhya Pradesh. These divisions went off quite smoothly without posing much hurdles as neither Uttar Pradesh, Madhya Pradesh or Bihar had a distinct identity. Other than the division of states, we also come across other demands, such as those for separation of territory from one state to add it to another. For example, Maharashtra has been claiming Belgaum in Karnataka, due to its Marathi majority character. A Commission under retired Supreme Court Chief Justice Mehr Chand Mahajan directed status quo on Belgaum, which was not accepted by Maharashtra.

(Continued on page 49)

A Himalayan blunder

The recent cataclysmic earthquake in Nepal and the frequent floods and other natural disasters plaguing the Himalayan regions, should alert us to the fact that we are now paying the price for our reckless, unsustainable development in these regions. Dr. Chandani Bhattacharjee forces us to think.

CIRCA 2015 - a massive earthquake of 7.9 on the Richter Scale hits the Himalayan nation state of Nepal on April 29 . Number of deaths; counting and expected to cross 10,000. Widespread aftershocks, spatial spread in Indian states of West Bengal, Bihar, NCT Delhi, avalanches in the Everest region too. This is followed by another earthquake on May 12.

Circa 2015 - Jammu and Kashmir floods in March 2015 seven months after the previous flood on the Jhelum River.

Circa 2014 (October) - Annapurna Summit trekkers impacted by a severe storm and avalanche; 43 killed and 175 injured; April, 2014 - Avalanche strikes the Everest Summiters killing mostly 16 Sherpas (mountain Guides); September 2014 - Jammu & Kashmir faces floods due to excessive rains triggering water logging, landslides, avalanches in the region, submerging 390 villages and bringing Srinagar under 12 feet water; Landslide in June and July in Chamoli and Guwahati; May 2014 - Kanchenzonga Peak avalanche, killing three.

How green was this valley

Welcome to the world of the Himalayas, the auspicious, impenetrable abode of snow, flanking India as a guardian in the North. These lonely, stately hills are a favourite of the humans and the gods and perhaps its mysticism has been locked in the innumerable stories of lamas, sherpas, Yeti, Hindu gods, sages, tantrics and



The April 2015 Nepal earthquake which caused huge destruction and flattened entire buildings including heritage structures

demons. It has a unique draw for trekkers and people seeking higher forms of learning. The majestic hills have been home to species unknown to the world and are India's biodiversity hotspot. Multiple rivers originate from these snow capped ranges: Ganga, Yamuna, Brahmaputra, Indus, Zaskar, Sutlej, Kali, Kosi, Teesta among many others which descend with their load of water and silt on to the plains bringing in their wake prosperity and agricultural bounty. Home to some of the loftiest peaks and glacier entrenched valleys, the Himalayas have attracted tourists over the years. Sporadically, there are economic activities such as cultivation along the mountain sides for rice, orchards for apples and oranges, plantations for tea and apricot,

handicrafts predominating in coniferous woods, wool, and lac, silver and mining along the slopes.

The degradation

It is indeed a world of fantasy and charm one rarely finds in the common world. A geographical region attached to India yet so definitively different in nature and regimes. A region so alluring that it has attracted development and degradation almost in the same breath. The mountain states in India – Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim, West Bengal, Assam and Arunachal Pradesh – have all taken to development rampantly, regardless of the limits to the natural threshold.

Some of our states are border states and have the unique need of

implacable infrastructure to protect the country at all times. Another problem in the region is the development of hydro electric projects to harness the mountain streams and distribute power. It is not that development is undesirable, but unplanned and unsustainable development is hardly desired. The Himalayan states have the urgent need to develop like the rest of India and have adequate infrastructure to encourage distribution of goods and services and have ample facilities such as health, connectivity, financial set up and resource base. Increased mobility of tourists has swung the graph of tourist visits to the Himalayan states only upwards, thereby placing greater stress on the mountain ecosystems.

The carrying capacity of the hill states is critical and may have reached a tipping point as has been witnessed in the recent surge of environmental disasters in the region. Over the past few years, the number of natural disasters has been on the rise in the Himalayas with almost three to four such occurrences in a year. The number of people impacted by the disasters has been rising too, as many more people have begun to live on the hills as also the number of tourists which has increased dramatically. Back in older times, the nature of the disasters were dominantly earthquake and landslides, and since the number of people living in the avalanche prone areas were very few, it never featured as a major disaster. Today, all disasters have become complex having multiple incarnations, so an earthquake can trigger landslides, dam bursts, avalanches and the people impacted have risen significantly. There is also a marked increase in the climatological disasters like cloud burst (flash floods) and floods in the Himalayas, (Kashmir, Leh, Uttarakhand), making the region vulnerable even in the seasons which were otherwise expected to be a safe time to travel into the hills.



Floods in Kashmir have become a regular occurrence

Are we on the right path to ensure that the hills are protected? Have we as a race forgotten the need for these hills for our survival, or are we deliberately choosing to ignore nature`s warnings? It would not be long that unplanned urbanisation, rampant

tourism development, building of dams and tunnels, mining and population pressure will choke the mysticism these hills have given to Indians/Asians. Would it take so much as a fraternity to ensure that we harness these hills more responsibly?

There is no better way to end my concern as an environmentalist but to state a small story of the hermit in 1992. While I was on a trek on the Kedarnath hills, a hermit calmly sitting in a rocky interior of a cave smiled at me and said, "Dekh lo beta, aaj hai, kal shayad na rahe" (See it my child, all this may not be there tomorrow) and he summed up what every environmentalist would like to say; spare the hills or else there would be none at all. In simple terms, live with nature or it will retaliate in a manner which will obliterate our entire race. ■

The writer is an academican, environmentalist and a naturalist. She is currently working as an Assistant Professor



at H.R.College of Commerce and Economics, Mumbai. Her core areas of research include water pollution, solid waste management and environmental ethics.

Today, all disasters have become complex having multiple incarnations, so an earthquake can trigger landslides, dam bursts, avalanches and the people impacted have risen significantly. There is also a marked increase in the climatological disasters like cloud burst (flash floods) and floods in the Himalayas, (Kashmir, Leh, Uttarakhand), making the region vulnerable even in the seasons which were otherwise expected to be a safe time to travel into the hills.

Are schools restricting knowledge?

Is our education system really educating our students? It sure equips them to ace exams, but is that the only goal of education? asks A. Hari, as he bemoans this obsession with exams to the detriment of diversified learning.

AT present our schools are functioning almost like a factory, equipping students with required skills to only get the maximum possible marks in the examinations. Very often, we hear the news that even students with top ranks are finding it difficult to get admission in the colleges of their choice and later, suitable jobs.

We must understand that companies do not give any importance to the academic performance of candidates during recruitment, and they assess the standards of students by conducting their own examinations. Even admission to reputed institutions like the IITs (Indian Institute of Technology) is being done only by conducting a separate entrance examination.

The top ranks have been secured by students only due to their ability to perform well in the examinations. The academic performance by no means reflects the knowledge level of students. The present schooling system has forced students to totally concentrate their efforts on scoring high marks and as such the knowledge they have acquired is mostly restricted to the contents of text books. This article discusses the need for revamping the concept of school curriculum in view of the dynamic changes in the trends of education.

Why must a student learn outside the curriculum?

A decade ago, students had time



Is bookish knowledge and rote learning enough? (photo for representation purpose)

to read novels, non-fiction books etc., when they had spare time. Now they don't have any time left to engage in such casual reading. Their reading is only restricted to their curriculum, that too only the portions from where the questions are expected! Great inventions have happened due to casual reading or exposure to related or unknown subjects.

Either the students do not have time or they do not have access to resources which will facilitate their learning in subjects which they like. If a student is interested in 'space science' during his schooling, it will be very difficult for him to get required information from the school. If a student is interested to read further in a particular subject beyond

curriculum, he must be encouraged and facilitated to do so. Additional credits must be given for such attempts. Interested students may be allowed to study a few additional subjects which may or may not be related to their curriculum.

Make education user friendly

A revision of the curricula, keeping pace with the tremendous progress of knowledge is of utmost importance. Very often we find committees are formed for revision of curriculum and only a few minor changes are announced by them after a great delay. After objections from stake holders, the so called 'tough' portions are deleted from the syllabus. A complete revamping of the curriculum

duly involving students and parents is very much required in tune with international standards.

Other changes required are:

- **Be child centered:** A child centered and activity-based process of learning should be adopted at the primary stage. Modern curriculum should carefully consider the specific need, interest and capacity of the learner in different stages of development while framing the syllabus.
- **Need for a flexible approach:** Higher educational programmes have to be redesigned to meet the growing demands of specialisation, to provide flexibility in the curriculum and facilitate a combination of courses from different streams. Students may be allowed to read a combination of subjects from science and commerce streams. Easier migration must be possible between streams. This will ensure that students learn what they like in their higher studies. Such flexibility will also ensure that there will not be any dropouts during studies.
- **Need for customising the curriculum:** Some students may be weak in particular subjects and may perform exceedingly well in other subjects.

In such cases, there is need for support with additional tutoring. Similarly, advanced lessons may be prescribed when a student performs outstandingly in any particular subject.

- **Be relevant to society:** The curriculum has to be responsive to meet the needs and aspirations of a society. The concerns and priorities of the nation should, therefore, be suitably reflected in the curriculum at all levels. The curriculum should be varied according to the needs of the community in a specific region.
- **Need for inclusive curriculum:** An inclusive curriculum is meant to afford all learners equal opportunities for lifelong education. Curriculum modification is necessary for learners with special needs even when an inclusive curriculum is being followed. Keeping the children with disabilities in mind while adapting the curriculum, changes in learning content, learning friendly environment, appropriate learning approach, adaptation in learning aid and evaluation should be done.
- **Need for updating knowledge:** Earlier, text books used to be the only

source of knowledge for students. The internet has made access to information very quick and real time. Efforts must be made to gather available resources on given topics and make it available to students, especially those who don't have access to internet.

Education is much more than schooling and it's an ongoing process. At present, the schooling revolves around the prescribed curriculum and the focus of teachers and students is restricted only to get maximum marks in the examinations. This situation must change.

I would like to leave you with this quote:

'Thinking precedes literacy and numeracy, but nowhere in the curriculum is that recognised.'
 – Mc Gavin, Glasgow University

The writer works as Chief Commercial Inspector in Southern Railways. He wishes to project a positive image of Indian Railways through his blog www.indianrlynews.wordpress.com. He is passionate about inspiring youth through his website: www.inspireminds.in



Stop the division - now!

(Continued from page 45)

The panel also suggested transfer of some villages from each state to the other. The issue has been hanging fire since then. If the authorities decide upon a moratorium on separation of territory after due consideration, the issue will certainly not fester around. As all of us are citizens of the same country, it will cease to matter whether the territory is in Maharashtra or Karnataka. Similar is the case with Kasaragod in Kerala. Many people want

the taluk to be merged with Karnataka, as it's an area with Kannada, Tulu and Konkani speakers in majority rather than Kerala's native language Malayalam – a language profile that is similar to Dakshina Kannada and Udupi districts.

If a political consensus is arrived at as indicated in the beginning, it would certainly put a full stop to demands for new states. The authorities can always sit with the people and discuss ways by which the area can develop further, enabling the bodies formed out of accords to fulfill their responsibilities. As

far as issues like Kasaragod or Belgaum are concerned, certain steps must be taken to address the grievances of the people regarding protection of their language or other issues if any. ■

The writer has worked with daily newspapers and prefers writing opinion pieces on issues of general and national interest, especially international and strategic topics with special reference to India.



Behind the veil

The practice of covering the head, especially by the bride during her wedding, is almost universal. Beyond that, the veil holds different significance for different cultures.

Shoma A. Chatterji *uncovers the ghunghat, the burqa and the veil to understand global concepts of femininity.*

In a contemporary global world, this head covering of a married woman holds significance that reaches far beyond a simple marriage ritual. Is it a reinstatement of social distance maintained by the bride once she is married? Or is it a space for privacy for the young bride? It is also a marker for the husband who begins to 'possess' his bride. Some say it symbolises cultural identity that gives others indicators about how to communicate with the bride. Today, for most women across the world, the bridal veil or *ghunghat* are ornamentations that enhance the bride's femininity by investing her with the coyness considered 'politically correct' for a newly married bride.

The bride's head is covered during a wedding in almost all parts of the world. This is a rite that is a custom dictated by tradition. In Hindu societies, particularly in the Northern and Eastern states, the bride kept her head covered in her matrimonial home even after she was married and became old. It

was a mark of respect towards elders in the family. The lifting of the veil or *ghunghat* was a part of ancient wedding ritual, symbolising the groom taking possession of the wife, either as lover or as property, or the revelation of the bride by her parents to the groom for his approval. The *ghunghat* or the veil or *chunri* was sometimes interpreted as a cover for the face, or a disguise. In times of yore, a sign of chastity and decency in married women was to cover their faces with the *ghunghat* in the presence of strangers. The putting on of the veil marked the transition from girlhood to womanhood.

Historical origin

The first recorded instance of veiling is in an Assyrian legal text from the 13th century BC, which restricted its use to noble women and forbade prostitutes and common women from adopting it. Ancient Greek texts have spoken of veiling and seclusion of women practiced among the Persian elite. Statues from

Persepolis depict women both veiled and unveiled. Surprisingly, it was supposedly regarded as an attribute of prostitution. Classical Greek and Hellenistic statues sometimes depict Greek women



A Hindu bride's ghunghat

with both their head and face covered by a veil.

In Christian weddings, brides would wear their hair flowing down their backs at their weddings. It was a symbol of their virginity. The white diaphanous veil is now a substitute for the same virginity. In ancient times, Roman brides wore a flame-coloured veil called the *flammeum*, said to protect the bride from evil spirits on her wedding day. Today, the bridal veil, usually a thin, gossamer-like fabric, lasts till the bridal couple drive away from the church and is never worn again. Interestingly, Christian women wear a black, netted veil in mourning and when they attend a burial or a funeral.

In Judaism, the tradition of wearing a veil dates back to Biblical times. When Rebekah went to meet her betrothed, Isaac, she veiled herself as he approached her. The veiling was both a symbol of modesty, and a definition of her personal space. Rebekah is known as the most self-assured of the matriarchs, and by veiling herself she indicated that she would still be her



The Muslim veil, the burqa

own person even when she would be living her life with Isaac. Rebekah did not veil herself when travelling with men to meet Isaac, but only when he was present or approaching.

A variety of headdresses worn by Muslim women in accordance with *hijab* (the principle of dressing modestly) are sometimes referred to as veils. These cover the hair, ears and throat, but do not cover the face (for example the *dupatta*, *khimar* and *buknuk*.) The *niqab* and *burqa* are two kinds of veils that cover most of the face except for a slit or hole for the eyes. The Afghan *burqa* covers the entire body, obscuring the face completely, except for netting over the eyes to allow the wearer to see. The *boushiya* is a veil that may be worn over a headscarf. It is made of sheer fabric. History says that the practice of wearing of the veil was uncommon among the Arabs before the rise of Islam. It originated in Byzantium, the original name of Istanbul. For Muslim women, the *burqa* and the headscarf have little to do with their marital status because little girls also wear it in public. The veil has become a potent symbol of the Muslim identity in recent decades. Yet, it's meaning for those who wear it, for those who see it being worn, for those who advocate the veiling of women, or reject it, is hardly uniform, and often ambiguous

Ghoonghat or *ghunghat* is a Hindi word which describes a veil worn by Indian women to cover their heads. Generally it is the *pallu*, the loose end of the sari that is pulled over the head by women in Uttar Pradesh, Bihar, West Bengal and so on. During a Bengali wedding, before the ceremony, the bride wears a separate, red veil that slightly covers her forehead but not her face. During the ceremony, the bridegroom smears her hair parting with *sindoor* and *pulls* the end of her wedding sari to cover her head, replacing the veil. She is then officially

The Bengali veil

The *ghomtaa* (the Bengali word for the *ghunghat*) among Bengali aristocracy at the turn of the century had an interesting edge to it. It gave women the only opportunity to express their emotions through facial gestures others could not see. They could frown, smile, tease, grimace, stick their tongues out and even laugh silently under the cover of the *ghomtaa* and no one would know. A reprimand, an insult, could go unpunished because they were invisible. They could even take voyeuristic delight by sneaking peaks at their husbands and other men in the family without anyone knowing. On the other hand, she could shed silent tears of pain, of suffering, of helplessness, of loss because loud wailing was not permitted except when someone passed away. Weeping in front of others was not permitted.

considered his bride. In Punjab and Haryana, brides use a long, red, heavily sequined *dupatta* over their bridal *salwar-kameez* during the wedding. In Rajasthan, the bride wears a long *chunri*, usually bright red with sequins and a heavy *zardozi* border. The *chunri*, worn with a *ghaghra choli*, is tucked in at the waist on one end, pleated beautifully around the body and draped delicately over one shoulder.

The *ghunghat* is still a form of veiling of women, practiced in rural parts of Northern India, especially in Rajasthan. Among the Gujjar community in Rajasthan, for instance, the veil for the girl implies sexuality that needs to be protected. But when a married daughter comes to her parents' village, she uncovers her head and never wears the veil because issues of sexuality do not arise. She is a daughter and sister to everyone in the village. When she goes back to her husband's village, she covers her head again. So, the same *ghunghat* that signifies modesty in the husband's village stands for wantonness in the parents' village! Thus, the same woman who voices an ironic critique of a cultural practice embraces the same practice with its implications of sexuality to uphold her family's honour that is integrally woven into her own. Strangely, the southern parts of India such as Tamil Nadu, Andhra Pradesh, Kerala and Karnataka, even Maharashtra do not

have this custom during or after the wedding. But widows in most of these states would earlier cover their heads with the *pallu* of their simple saris. The reason was different. It was considered inauspicious to see their faces because of their widowed state!

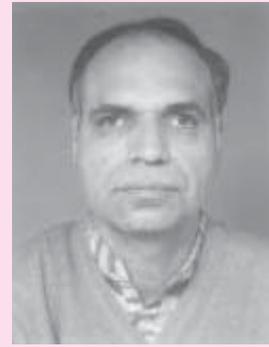
The most democratic quality of the *ghunghat*, the veil, the *chunri* and the *dupatta* is that it crosses all barriers of moral codes for women across the world. Nuns wear hood or a veil along with their habit. The courtesan also covers her head. So do dancing girls. Veils are part of the stereotypical image of the courtesan and harem woman. Rather than the virginity of the bride's veil, the modesty of the Muslim scarf or the piety of the nun's headdress, the mysterious veil for the courtesan is a symbol of the erotic, the sensual and the unknown. ■

The writer is a freelance journalist, film scholar and author. She has authored 17 published titles and won the National Award for Best Writing on Cinema, twice. She won the UNFPA-Laadli Media Award, 2010 for 'commitment to addressing and analysing gender issues' among many awards. She is currently Senior Research Fellow, ICSSR, Delhi, researching the politics of presentation of working women in post-colonial Bengali cinema 1950 to 2003.



Small steps, giant benefits

Small farmers in India are a neglected and poor community. It is possible to make them financially viable by the adoption of integrated agricultural practices, as demonstrated by the Sahbhagi Vikash Abhiyan in Odisha.



Bharat Dogra
is a Delhi-based freelance journalist who writes on social concerns.

ONE of the most important priorities in India is to protect and promote the sustainable livelihoods of small farmers. On the one hand, there is the question of their sustainable economic well-being based on ecologically protective farm practices which protect the basic resource base including soil, water, seeds, biodiversity and knowledge. On the other hand, there is the related question of the sustainable production of adequate, nutritious and healthy food for all.

While several groups have been working on various important aspects of these issues, one group which stands out due to its down to earth understanding of the problems of farmers is Sahbhagi Vikash Abhiyan or SVA. The fact that this work is based in and around the sensitive Kalahandi region (West Odisha) and touches the lives of several tribal communities (apart from dalit and other communities), further increases the significance of the efforts of the SVA.

The recent work of SVA has included diverse issues like proper implementation of forest rights, improving income of non-timber forest produce gatherers, access to safe drinking water, promoting self-help groups and cottage enterprises including agro-processing, publication of development literature, strengthening Panchayat Raj with emphasis on *gram swaraj* approach. However, in the middle of many commitments, the one overwhelming aim of the SVA has been for strengthening the sustainable livelihoods of small farmers.

The SVA (campaign for participatory development) started as a collective of several concerned individuals and community based organisations in the year 1993-94. However, the activism of many of SVA's leading members (including its founder President Jagdish Pradhan) goes back to much earlier days. They had been active in many struggles and campaigns on behalf of farmers, forest produce collectors and other villagers. SVA works in parts of four

districts of Odisha (Kalahandi, Nuapada, Bolangir, Bargarh), covering a total population of about 15 lakh people and having direct links with about 16,000 households. Self-help groups of women have made an important contribution to economic security, thereby reducing dependence on usurious moneylenders.

It is now well-recognised that even in the so-called most successful 'green-revolution' states like Punjab, the spread of high-yielding varieties dependent on high doses of chemical fertilisers, pesticides and weedicides, had many adverse long-term impacts, leading to serious health and pollution problems as well as very high costs and indebtedness for farmers. SVA repeatedly gave a timely warning against such chemical-intensive, polluting, hazardous and expensive technologies which also made farmers highly dependent on purchasing seeds and other inputs. It is here that the SVA has made its most important contribution of constantly engaging in, experimenting with, evolving and extending those farming patterns, methods and technologies which can increase productivity and income in ways which are low-cost, ecologically protective and self-reliant, and as close to the concept of gram swaraj as is possible.

One of the important aspects of this technology is to combine the cultivation of cereals, millets, legumes, vegetables, fruits and spices with animal husbandry (with special emphasis on cows and bullocks). It is common for 2 to 3 acre farmers using this technology to grow even up to 30 mixed and diverse food crops within a single cropping year.

Farming methods which minimise purchased inputs are prioritised so that farming costs can be kept very low. Hence, chances of indebtedness are reduced. Some expenses cannot be avoided (such as in the case of borewells), but attempts are made to make good use of existing government schemes to reduce expenses for farmers as much as possible. ■

The woes of inclusion

When the poor subscribe in millions to government sponsored schemes, there are many twists before the benefits can finally reach them. Or sometimes, not reach them.

NUMBERS tell a story. We already have 150 million subscribers to the Pradhan Mantri Jan Dhan (PMJD) scheme announced in August 2014. That is a phenomenal achievement by any yardstick and doubtless Guinness Book material. It is inspiring to know just what a Prime Minister with good communication skills, campaign abilities and a state owned banking system to command, can achieve. The previous government could only make 100 million accounts over a much longer period.

The story speaks of the estimated 300 odd million absolutely poor people in our country, 150 million of whom responded to the media and cell phone campaign rather quickly. It tells us something about the degree of penetration of these modes of communication. These new account holders craved to be included and must have travelled some miles in the remote villages and small towns to use their Aadhar cards thus. That also tells us about the degree of despair and hope. Despair, because almost 82 million (i.e. 71%) according to recent reports do not have any money at all to put into these accounts, not even a few hundred rupees (these are being called zero balance accounts with no frills). Private banks account for only 3.6% of the total 'Jan Dhan' accounts with a smaller proportion of zero balance accounts. So the bulk of these accounts are in the public sector banks. The rest of the accounts do not have more than an average deposit of ₹ 500 per account. The story paints a picture of penury. The lure of subsidy on LPG and other 'Direct Benefits Transfers' if any, therefore remains powerful. One can only infer that the ones who responded to the campaign were better informed, perhaps better off among the poor and they were not already included in the previous financial inclusion drive. So they put aside time and money to travel to the nearest banks and stand in long lines all day.

The story has a climax. The PMJD scheme was soon declared a demand-based success. Ten months later we



Anuradha Kalhan

is a Fellow at Teen Murti, Nehru Memorial Museum and Library (NMML).

have some more schemes under the same 'National Mission for Financial Inclusion' (NMF), the most noteworthy being 'Atal Pension Yojana' (PMAP). The official website says that 'Atal Pension Yojana was launched in continuation to the 'Jan Dhan Yojana' scheme to bring those employed in rural and unorganised sector under the ambit of pension schemes. These workers live an insecure life since banking and pension products do not reach them from the employers, and thus Yojana would at least ensure them of the basic requirement for old age. The idea of the scheme is "to provide a definite pension to all Indians". To get pension during their old age, they need to contribute accordingly. The more they can contribute regularly now, the more pension they get during old age. The scheme is backed by the Ministry of Finance, Government of India. It requires that a declared amount be auto deducted from Jan Dhan accounts. For those who have nothing or nearly nothing in their Jan Dhan accounts contributing to pension may seem like a preposterous story.

There is a sub plot to enhance social security. If not in this life than in death there may be a better landing. There is a new 'Pradhan Mantri Jeevan Jyoti Beema Yojana'. Here according to the website there is a 'renewable life insurance cover of ₹ 2 lakhs on the mere premium of ₹ 330. The premium will be auto debited from account'. Any Indian resident between the ages of 18-50 can avail of this opportunity to leave ₹ 2 lakhs to a nominee in case he or she dies due to any reason. LIC, the public sector insurance giant will be the main administrator of this small mercy. To get any benefit the Jan Dhan accounts have to be active and with more than zero balance.

The valiant public sector bank staff who have dealt with the deluge of demand for inclusion after 'identification and authentication' have done so in record breaking time despite a shrinking staff and reduced rural spread. But that is yet another story. ■



YOUNG

IMMORTAL COMIC CHARACTERS

Spider-Man

THE Amazing Spider-Man was created to satisfy the comic-loving teenagers of the 60s. He continues to thrill and inspire thousands of fans of every age in every country through comics, merchandise, TV series, video games and films.

American Stan Lee first came up with the idea of an 'ordinary' teen hero with all the problems of his age, with a secret identity as a crime-fighter. When artist Steve Ditko gave him a colourful costume with a mask to hide his youthful face, and a unique clinging power, a new superhero was born. The first story featuring Spider-Man was brought out by Marvel Comics in August 1962. Within a year, he had his own solo series. Sales soared, and to college students he became a revolutionary idol on par with Che Guevara and Bob Dylan.

Spider-Man was born Peter Parker. Peter's parents are dead and he is brought up by his Uncle Ben and Aunt May in New York City. He is a brilliant student, but is ridiculed as 'Puny Parker' by his peers, and is painfully shy. Bitten by a radioactive spider at 15, Peter develops amazing strength and agility, and the capacity to cling to any surface like a spider. He also discovers that he now has a 'spider sense' that warns him of danger. Thrilled, he sets out to use these powers for personal gain. But his uncle's murder by a criminal he had not bothered to capture makes him realise



that great powers come with great responsibility. Spider-man then decides to fight crime. However, to earn a livelihood, he becomes a photographer for the Daily Bugle (whose owner thinks Spider-Man is a fraud and a trickster!).

Through the years, Spider-Man has grown from high-school student into a family-man; his powers too have increased; so have his enemies from various strata (who can forget Doctor Octopus and Green Goblin). He has mostly fought alone, though he has teamed up with most comic super heroes at some time or other. Only one thing has not changed over the years: his immense popularity.

AMAZING LIVING WORLD

Hissing birds



Most people and animals have a dread of snakes. So what better way of defence than to imitate a snake? Cats are known to spit and hiss when they are provoked. Some birds do it, too. A woodpecker called the Wryneck extends its long neck, sways and makes a hissing sound when guarding its nest.

Another bird that uses the same ploy is the little cut-throat finch of Africa. The male has a blood-red band of feathers around its throat, hence, the name. The finch makes a ball-shaped nest. If it is disturbed while sitting on its eggs, it does not fly away like most small birds would do, but stays put and hisses like a snake, eyes gleaming coldly! It then begins a remarkable 'snake dance'. It writhes its body sinuously, undulating exactly like a crawling snake.

So lifelike is the display that even human beings instinctively draw back in fear.



ART BEAT

Dance fiesta

HOLA! If you are game for a visual extravaganza, then head off to Mexico to witness the annual Guelaguetza dance festival. Held in Oaxaca, a UNESCO world heritage city the fiesta combines the ancient celebration of the corn goddess, Centeotl, and the Catholic feast day of Our Lady of Mount Carmel. It is celebrated on two consecutive Mondays in July on a hill called Cerro del Fortín. Hence, it is also known as the Lunes del Cerro (Mondays on the Hill).

Oaxaca is home to several ethnic tribes, which send delegations to the event to showcase their diverse indigenous cultures. Gaily-attired men and women dance merrily to scintillating music before an admiring public. After the performance, the dancers shower gifts like local fruits, herbs, crafts etc. on the crowd. The festival also features colourful parades, stalls selling local cuisine and handicrafts and other



events like plays and concerts.

The Guelaguetza is the people's way of ensuring the continuity of their heritage in the modern age.

QUEST



Why are aeroplanes in flight generally not affected by lightning strikes?

When lightning strikes a tree or some other structure on the ground, the top of the structure gets charged with high voltage while the lower portion (in touch with the ground) remains at zero voltage. This high potential difference sets off a very high current in the structure, causing sudden heat generation in the material and its subsequent destruction.

If an aeroplane in flight gets hit by lightning, the plane's entire surface acquires the same high potential and as there is no potential difference, there is no current and no destruction.

Did you know?

In 1957, BBC's Panorama announced that since Spring had come early that year, the spaghetti harvest in Switzerland had also begun early. A video clip showed a happy peasant woman harvesting the popular Italian pasta from the trees. A commentator even said that the spaghetti weevil that had wreaked havoc with the harvests in past years had been vanquished. Most people swallowed the story and realised that the news channel had played a prank on them when they recalled that the day was 1 April — All Fool's Day.

MINDBENDER

Flowers in the garden

Five kinds of flowers grow in five gardens located on five different streets. Find out the names of the owners, the flowers they grow in their gardens and the streets in which the gardens are with the help of the clues below:

1. The Shahs do not grow violets.
2. The Mehtas grow orchids and don't live on 2nd street.
3. The Patels live on 3rd street.
4. Champas bloom on 4th street.
5. Roses do not grow on 5th street.
6. The Joshis do not live on 1st street.
7. The Rathods do not grow marigolds.
8. The Joshis grow roses.
9. Marigolds grow on 1st street.



Answer: Shahs-marigold- garden on 1st street; Joshis- roses-garden on 2nd street; Patels-violets-garden on 3rd street; Rathods-champa- garden on 4th street; Mehtas- orchids-garden on 5th street.

PANDIT DEENDAYAL UPADHYAYA

Political scientist and social thinker (1916-1968)

PANDIT Deendayal Upadhyaya was a many faceted personality - philosopher, economist, sociologist, historian, journalist, political scientist, social thinker, educationist, politician, writer, speaker, organiser, etc. An ideologue and a guiding force for an alternative model of governance and politics, he was an important leader of the 'Bharatiya Jana Sangh', the forerunner of the present day 'Bharatiya Janata Party' (BJP).

'There is diversity and plurality in life but we have always attempted to discover the unity behind them', he averred and also stressed that "the fundamental characteristic of Bharatiya culture is that it looks upon life as an integrated whole".

Orphaned when young, he was brought up by his maternal uncle. He excelled academically, but his wish to pursue a Master's degree in English literature was thwarted on account of a cousin's illness. He declined to join the Provincial Services Exam because of his interest in working with the common man.

When still a college student in 1937, he came into contact with the Rashtriya Swayamsevak Sangh (RSS) and engaged in an intellectual discussion with the founder K.B. Hedgewar. Having Sunder Singh Bhandari as one of his classmates gave a fillip to his public life and he soon dedicated himself to full time work with the RSS from 1942.

In 1951, when Syama Prasad Mookerjee founded the Bharatiya Sangh, Deendayal was tasked with moulding it. Appointed soon as the all-India General Secretary, his acumen and meticulousness deeply impressed Mookerjee enough to elicit his famous remark: "If I had two Deendayals, I could transform the political face of India". He was a man of soaring idealism and had a tremendous capacity for organisation. He started a monthly Rashtra Dharma from Lucknow in the 1940s and later a weekly Panchjanya, and a daily Swadesh.

The entire burden of nurturing the orphaned organisation and building it up as a nation-wide movement fell after

Mookerjee's death in 1953, on the young shoulders of Deendayal, who built it up, brick by brick.

Well known for his idea of integral humanism, the concept deeply embedded in the Indian psyche, he favoured economic freedom and opportunities for entrepreneurship, and criticised the government of the day for stifling avenues of investment. He accused Nehru who he said, "was a socialist when it came to levying taxes, but a capitalist when it came to amassing profits".

On the other hand, he emphasised decentralisation of the economy to empower local communities to make economic and developmental choices. He did not favour big business; he preferred the Gandhian ideal of large production from small units, "manufactured by the masses for the masses".

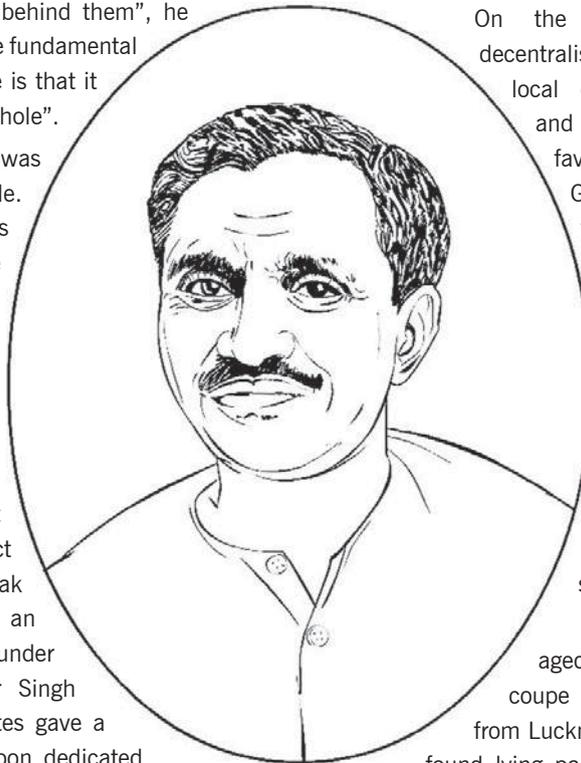
Recently, Prime Minister Narendra Modi launched the 'Pandit Deendayal Upadhyay Shramdev Jayate Karyakaram', which is an attempt to create an environment conducive to industrial development while also ensuring transparency in the labour sector.

On 11 February 1968, Upadhyay, aged only 51, boarded the first-class coupe of the Sealdah-Pathankot Express from Lucknow, bound for Patna. His body was found lying parallel to the railway tracks outside

Mughalsarai station in the early hours of the morning. A commission appointed concluded that he had been pushed out of the compartment by unidentified thieves, struck his head against a traction pole and died. It was murder, but was it assassination? Till date, it has remained an unsolved mystery.

Needless to state, had Upadhyaya survived, there's little doubt he would have today impacted the politics of India. As he would say, "Strength lies not in unrestrained behaviour, but in well regulated action." ■

– A. Radhakrishnan is a freelance journalist based in Pune, Maharashtra



HAVALDAR BHANUBHAGTA GURUNG VC

Exemplary soldier (1921-2008)

HAVALDAR Bhanubhagta Gurung was born in September 1921 in village Phalpu in western Nepal, and joined the Indian Army in 1939. He was posted to the 3rd Battalion 2nd Gurkha Rifles (3/2 GR, known as the Seymour Rifles). The Japanese Army captured Rangoon in March 1942 and the British decided to evacuate their forces from Burma. They managed to reach Imphal in Manipur by May 1942. An offensive operation by the British into Arakan was unsuccessful. They did not have adequate resources to carry out a major attack and opted for deep penetration by Special Forces under Brigadier (later Major General) Wingate. 3/2 GR was part of this brigade. About 3000 men entered Burma in March 1943 to disrupt the lines of communication of the Japanese Army. Bhanbhagta was in column Number 4 and was promoted to Lance Naik. The unit was ambushed by the Japanese and suffered heavy casualties. The force returned to India and all the units including 3/2 GR were brought up to full strength, trained and were ready for offensive operations into Burma. His unit was now part of 25 Indian Division and he was promoted to Naik.

The 14th Army had launched an offensive towards Mandalay in Central Burma and 25 Division was ordered to carry out a diversionary attack along the coastal sector in Arakan. The Division cleared the Myeben Peninsula, thus denying the use of waterways along the Arakan to the Japanese, while 3/2 GR landed at Ru-Ywa. Bhanubhagta was reduced to ranks for going to a wrong hilltop and was sent to another company. It was later established that he was wrongly punished. He showed exemplary camaraderie by carrying a wounded soldier on his back three miles in the jungle terrain and getting him treated. 'A Company' took up positions on the two hills on the dominating feature 582 by 4 March 1944. The two hills were nicknamed Snowdon and Snowdon East. The Japanese attacked Snowdon East during the night killing half the Gorkhas and the remaining soldiers, out of ammunition, made their way to B Company on Snowdon. 'B Company' in which Bhanbhanga was serving

was ordered to re-take Snowdon East regardless of costs.

Bhanubhagta's section was pinned down due to heavy fire from light machine guns and mortars. Over and above that, a sniper lodged on a tree was inflicting casualties on the section. Bhanubhagta stood up exposing himself to the enemy fire and shot down the sniper in the tree, thus saving the section from any more casualties. He led his section to a spot 20 yards short of the objective crest when the section was held up again by fierce enemy fire from foxholes and trenches on the

ridge. Bhanubhakta charged to the top and lobbed

two grenades into a foxhole above him, killing its two occupants. He rushed on to clear the next trench with a bayonet charge. Savage hand-to-hand fighting ensued as Bhanubhakta cleared two more foxholes single-handedly. For the fifth and last time, he rushed on alone to tackle an enemy bunker, lobbing his last two smoke grenades through the slit from above. The feature had been cleared but the Japanese were collecting for a counter-attack. He installed a Gurkha with a machine gun, just in time to repel the counterattack with support of two other riflemen. He was awarded Victoria Cross (VC) and the unit was authorised the Battle Honour Tamandu where the battle took place.

His company commander tried to persuade him to continue in service but he decided to go home on retirement in January 1946 to look after his frail widowed mother and his young wife. He was given the rank of Honorary Havaladar. His three sons served in 2 GR. He suffered from asthma and spent the last four years of his life with his youngest son in village Gorkha where he passed away on Saturday, 1 March 2008. He was cremated at the holy site of Devghat at Chitwan. The funeral was attended by family members, friends and representatives from 2 GR. A piper played the last post as his body lay draped in a flag of 2 GR. He was awarded Star of Nepal, 3rd class, and in 2000, the Gurkha training block at Caterick, United Kingdom, was named after him. ■

– Brigadier Suresh Chandra Sharma (retd.)



BHICOO MANEKSHAW

Flamboyant restaurateur par excellence (1922-2013)

SHE was the first Indian to complete the Advance Certificate Course of the Cordon Bleu School of Cookery, London. Bhicoo Manekshaw's fondness for good food and cooking began at the age of five in her grandmother's kitchen. Blazing a pioneering trail came naturally to Bhicoo Manekshaw. In Queen Mary's High School, Mumbai, Bhicoo opted for cookery for her Senior Cambridge. As the school lacked the facilities and a cookery teacher, Bhicoo learnt cooking under her mother.

In the early 1960s, her husband Wg. Cdr. Jemi Manekshaw (later Air Vice Marshal) was posted in London, where she seized the opportunity to do an advanced three months course of Cordon Bleu. Only 10 people were taken at a time, and all seats were booked a year earlier. Since her husband had a short posting, she couldn't wait for the next batch. She sought an appointment with the principal, showed her recipes and even demonstrated her culinary abilities. She made an egg with bananas (her community, the Parsis, love eggs) and a chicken in light gravy. She was accepted for the course the same year.

Bhicoo Manekshaw's prolific career as a catering consultant included assignments with the West End Hotel and the Raj Bhavan in Bengaluru, during the tenure of Governor Dharma Vira, and the India International Centre (IIC), Delhi. During her 15 year tenure with the IIC, Bhicoo Manekshaw introduced new Indian and Continental cuisine, including a *plat du jour*. As Catering Consultant to Chef Air and Air India, she oversaw the catering of all VIP flights including those during the NAM and CHOGM conferences, and the VIP lounge at the 1982 ASIAD Games.

She played an active role in compiling and contributing recipes for the Time and Talents Club Cookbook and the Delhi Commonwealth Women's Association Cookbook. In 1981, at Indira Gandhi's request, Bhicoo contributed several recipes, on her behalf, for the cookbook published by the Royal Prince Alfred Hospital King George V Appeals Committee, Sydney, Australia.

Bhicoo Manekshaw's first cookbook, 'Traditional Recipes of India' was published in 1974 and her second, 'Parsi Food

and Customs', in 1996. The latter was a best seller and was renamed 'The Essential Parsi Cookbook' in its second edition. Parsis in India and the diaspora refer to the book not just for its recipes, but also as a guide to perform ceremonies associated with weddings and Navjotes. Her third book, 'Feast of Love', a menu-based cookbook on Continental cuisine was launched in March 2007. Bhicoo believed that one can never stop learning and in 'Feast of Love' she initiates a novice from the basic techniques of Continental cuisine to the creation of a haute cuisine meal. Her last publication, 'Secrets from the Kitchen – Fifty Years of Culinary Experience at the India International Centre', was compiled by her and Chef Vijay Thukral of the IIC.



In December 1974, at a small dinner party at IIC to celebrate Sanjay Gandhi's wedding, she ticked off Mrs. Indira Gandhi for keeping the lobster soufflé waiting. Mrs. Gandhi, who knew the value of such things, took the reproof well. A cold dessert was out of the question in winter and Mrs. Gandhi didn't favour hot puddings. Bhicoo served a French dessert made with meringue, filled with whipped cream and fruits. Mrs Gandhi wanted to know what it was called. Mrs. Manekshaw promptly replied, "Gâteau Indira!"

It was only fitting, that Bhicoo Manekshaw set up 'Basil & Thyme', Delhi's first standalone continental restaurant. On the opening day, the electricity went off and unable to bake the beer cake she'd planned, she served a beer soufflé instead. She received many compliments that day, one was from a lady visiting India, who said she'd never had a beer soufflé anywhere in the world before! "Naturally! Where else would the electricity go dead on a restaurant," quipped Mrs. Manekshaw. Her anecdotes always had a culinary point.

Managed by her daughter Erna and son-in-law Sunil Chandra, recently Basil & Thyme was recognised by the Times Food Award in the category of 'Best European' - a tribute to Bhicoo Manekshaw's zeal for enhancing palates in the capital. ■

– Piroj Wadia is a veteran film journalist.
(Sketches of Great Indians by C.D. Rane)