Civil Society

THE STRAY DOGS TANGLE

Do we love them enough to get them off the streets?

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Civil Society
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IN THE LIGHT

SAMITA RATHOR

litchi trees. After it was declared commercial hardly any trees are left. People say cutting trees is a crime but everybody here is doing it and living quite happily. They put acid on the roots of trees to destroy them. Please help us save Doon.

Ashish Bhasin

Protecting boys

Your coverage of Blue Umbrella was excellent. Thank you for your time and support.

Sujay Joseph

Thanks for highlighting an important but ignored issue — the silence on sexual violence against boys. They too should get support, counselling as well as legal recourse. Butterflies is doing excellent work.

Shantha Shashi

Mango village

Shree Padre's story, 'This is India's mango village,' was a great read. Shyju Machathi has done exemplary work in documenting Kerala's many mango varieties.

He truly deserved the Genome Saviour Award. His work is as painstaking as that of a scientist.

But I feel the need of the hour is to capitalize on unique mango varieties by encouraging food processing plants and exporting a range of mango products.

How can this be done and what are the hurdles in the way should be studied.

Sathya Kumaraswamy

Letters should be sent to response@civilsocietyonline.com

LETTERS

Joining politics

'Officers and politicians,' by Anil Swarup was informative and provided many useful solutions. The idea of entrusting the UPSC to set up a panel of retired bureaucrats for post-retirement assignments is a good one. It will increase public trust in the system. There must also be a cooling off period.

Jayadev Sahu

Officers from the elite IAS have a lot of administrative experience and knowledge. The country should continue to benefit from their skills. Therefore having a system by which they can be rehired is an excellent idea. Politics might then be a less attractive option.

Subhash Singh

The article was enlightening as well as being very well-written and informative.

Vijay Dixit

Since both politicians and bureaucrats work in close proximity it becomes easier to escape the law and wield influence.

Satya Prasad

Dying rivers

Your interview with Venkatesh Dutta, was insightful. Indeed we do tend to ignore small rivers at our own peril. In hilly areas, streams are a lifeline. But all our focus is on the big river. A comprehensive plan including all water bodies is most important.

Shantanu Sen

Revival of rivers needs micromanagement which politicians are unable to do. Mobilizing village communities and giving panchayats the responsibility of looking after their rivers and ponds is an option.

Suraj Anand

Trees and roads

'Tourists or trees? Doon picks trees,' was a very timely story. The land mafia is operating with impunity in Dehradun. I reside on Sahastradhara Road. It was declared a 'commercial' road some years ago. I don't know why in India they declare a complete road as commercial. Anyway, Sahastradhara Road was full of

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Dogs at home and on the streets

COVER STORY

THE STRAY DOGS TANGLE

The problem of stray dogs in India has turned into a serious crisis. Children have been mauled to death and the number of bites in a year is said to be in millions. A close look at the issue.

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COVER PHOTOGRAPH: LAKSHMAN ANAND

THERE have been dogs at home from as far back as one can remember. They were always part of the family. Our last one, Peppy, passed away after spending 14 years with us. She came off the street as a pup and her destiny was to be with us. When her end came, we were all very sad. She was cremated with affection and great respect for having guarded our home for so many years. Her ashes, in an urn, stood on her bed till we finally decided to bury them under the *kadi patta* tree in the back garden where she used to hide her bones.

Keeping dogs is always an emotional trip. Both sides end up needing each other. But for the human beings in the relationship, there are also duties and responsibilities. Dogs have to be trained, vaccinated and kept in control. All over the world the rules of dog ownership are taken seriously. It is ownership which makes the difference between a house dog and a stray one roaming the streets where no one is responsible for the dog's behaviour.

To regard dogs as anything more than the animals they are is to get the whole equation wrong. Dogs have their moods and personalities. They can be wicked and docile. They behave differently in packs. They have their reasons for barking and biting that one can never fully fathom.

To us in this magazine the problem of strays is a governance issue. The authorities at all levels have abandoned responsibility. The result is that our streets have been taken over by dogs that no one can control. Feeding them in public places, as some people do, only makes the problem worse. Being goodhearted is not enough. People who claim to love dogs should keep them in their homes. Otherwise, the only solution lies in the government stepping in and putting stray dogs in pounds the way it is done all over the world.

The Supreme Court must now protect the rights of people who feel threatened by stray dogs and are being browbeaten into silence by vocal animal rights groups. Several children have been mauled and killed by dogs. It is shocking that this hasn't shaken the conscience of society at large. The civic authorities have looked on saying that the Animal Birth Control Rules don't allow them to take away strays. Such rules clearly need to be reframed to be more realistic and reflect best practices elsewhere in the world.

Also in this issue is an interview with Srinivas Kodali on the privacy concerns surrounding Aadhaar and an interaction with Pallavi Aiyer on the role of the foreign correspondent and her two immensely readable books on China and Japan.
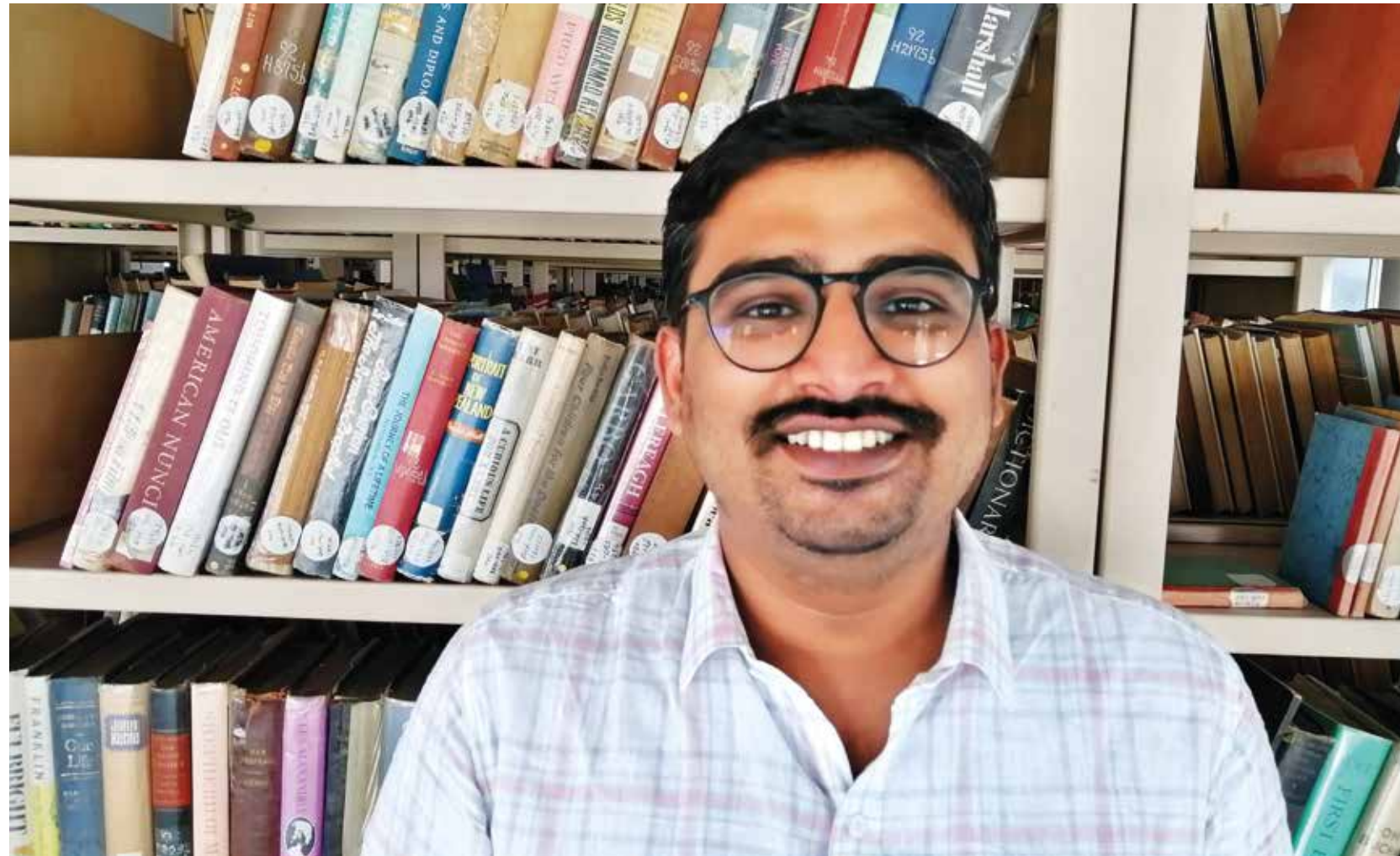
Srinivas Kodali: 'When your fingerprints as passwords are not secure, the only thing you can keep secure is your Aadhaar number'

'In villages you need to disclose your Aadhaar number'

Srinivas Kodali on loss of identity and bank frauds

Civil Society News
Gurugram

AN Aadhaar card has become indispensable. It has simplified a great many transactions, allowing them to happen almost instantly. But with growing usage have come concerns. Financial dealings may have become quicker but fraudsters are known to be gaming the system. Establishing one's identity instantly with an Aadhaar number may be a boon and yet identity thefts and creaming away of biometric data is throwing up serious challenges.

Recently, the Unique Identification Authority of India (UIDAI) issued an alert against misuse of Aadhaar numbers in financial transactions. It advised people not to give out their cards except as a masked version with only the last four digits of the Aadhaar number showing.

The advisory was quickly withdrawn lest it led to panic. But it confirmed growing fears that the useful identity is not without some serious drawbacks.

To know more we spoke to Srinivas Kodali in Hyderabad. He has worked for the UIDAI and is a close observer of how Aadhaar is used and gets misused.

Kodali is a champion of the democratic use of technologies and one of his criticisms of Aadhaar is that it was designed for commercial ends, keeping only the rich in mind. Its flaws weigh heavily on the poor, he tells us. It is also a challenge to democratic freedoms by allowing governments to surveil people. Linking voter identity to Aadhaar may leave out millions from voter lists.

Kodali graduated with a B.Tech in civil engineering from IIT Madras in 2013. He's been keenly involved since his student days with open data communities. "Open software is a form of political activism for the politics that arose in the software world," he says. "Production of software is interlinked to freedoms not only in the software realm but outside as well."

Is Aadhaar data being misused and if so, how bad is the problem?
Aadhaar data has always been misused. There is so much documentary evidence. You go to YouTube and there are people explaining how to misuse Aadhaar, photoshop it, change it or get one made. It has been a constant problem plaguing the system since its creation.

The UIDAI has been blacklisting several operators who have been enrolling Aadhaar in bulk or without verifying people. These complaints were so bad that at one point of time, the MHA (Ministry of Home Affairs) wanted to take over the Aadhaar project.

There were fights between the UIDAI and the MHA and to settle the matter, it was decided the MHA will issue Aadhaar in the border areas and the UIDAI will issue it in the inner states. The problem for the MHA was that Aadhaar cards were being issued to non-Indians and they were able to get passports based on Aadhaar. Fraud was associated with this system from day one.

Is biometric data being compromised?
The point is, where it is being compromised. The UIDAI claims their databases are secure — which may be right or wrong, I don't know. The fact is, you give your fingerprints at a variety of locations: when you have to get your passport, your driver's licence or for land registration. So, if your biometrics get leaked at any of these locations it's still a breach. Your biometrics are not secure, at large, or under your control.

If you touch a bottle, you leave your fingerprints. Anyone can extract them. The police do this all the time when they have to investigate a crime scene for forensics. The (open software) community has been telling the UIDAI that fingerprints as passwords is a very bad idea.

When your fingerprints as passwords are not secure, the only thing you can keep secure is your Aadhaar number which becomes your username. If your password gets leaked, at least someone else does not have your username. But if your username gets leaked it's easy to get your password because your fingerprints are everywhere.

The Aadhaar number needs to always be secretive. When the initial Aadhaar Act was drawn up in 2016, it said publication of Aadhaar numbers is a bad idea. Biometrics as authentication for Aadhaar is an inherent design problem. It is leading to a lot of these problems. You can't change your biometrics and you can't change your Aadhaar number.

And the fact that we are using Aadhaar across the board for so many services, is that a problem?
Yes, absolutely. If you use the same username and password for your Google, Facebook, WhatsApp and email accounts and if there is one breach in one of these databases… (your data gets compromised). Which is why you are advised to not use the same password everywhere. It's not safe security practice and the cyber security and infotech community has known this for years. People who designed the Aadhaar system never cared about this at all.

Why this fatal flaw?
There were a host of political reasons apart from economic interests to build a data economy around Aadhaar. You had national security interests — the project came right after the Mumbai terror attacks. The NPR (National Population Register) and Aadhaar were happening simultaneously as part of the 2011 Census. That is when this project took off.

There were economic interests from the Indian IT industry. You had Mr (Nandan) Nilekani pushing for a digital identity and a sort of data collection. There was the MHA which wanted to collect details of everyone in the country, including biometrics. The MHA has been collecting fingerprints of criminals for the past 200 years.

We are not really sure where fingerprints came in from, whether it was the economic interests of the IT sector or Mr Nilekani's decision or whether it was imposed on him by the MHA. There was an initial agreement to share all the biometrics that the UIDAI collects with the MHA which the Supreme Court stopped. There were a lot of factors at play in the early stages of the project which could have led to this.

One critical issue is that people are losing their money by linking their bank accounts to Aadhaar. If Aadhaar is delinked, won't that solve most of these problems of fraud?

> ## 'In the entire decade of the existence of Aadhaar they have not followed a single rule that the courts have ordered. The CAG report reflects this.'

There are many types of fraud with Aadhaar. The easiest is identity fraud. If I have a photocopy of your Aadhaar with your number and all details I can just replace your photo with mine and use it everywhere.

Banking fraud is happening because Aadhaar is being linked to bank accounts. We have multiple payment systems linked to Aadhaar. One is called the Aadhaar Payments Bridge (APB) System. It is used to send money from the Consolidated Fund of India account to individual accounts for DBT (Direct Benefit Transfer) subsidy. That's its only purpose.

If your bank account number or Aadhaar number is changed in any of the subsidy linkages the money can go to different accounts instead of coming to your account. That's one type of fraud.

The second type of fraud is when somebody withdraws money from your account. This is happening via Aadhaar-enabled payments systems which are micro ATMs. Rural India has no ATMs or banks, so to withdraw money from their accounts people need payment systems. Aadhaar was to do that. It was always linked to financial inclusion.

So, people can withdraw their money by giving their Aadhaar number and biometrics. But every time you do this, you don't know whether you are giving your biometrics for withdrawing rations or money. It's like using the same password and login for a host of services.

In rural India you are forced to share your Aadhaar number and biometrics. If you are a privileged person who doesn't get subsidy and you only need to use your Aadhaar for income tax purposes, you can say no to almost everything else.

How do we avoid this? The reason all these vulnerabilities are happening is that when you link your bank account to your Aadhaar number the payment instrument becomes active. If I don't link, then I'm safe even if someone has my Aadhaar number.

The Supreme Court clearly ordered Aadhaar was not to be linked to bank account numbers. Yet the RBI and the finance minister are forcing bank account linkages for PMLA (Prevention of Money Laundering Act) requirements. It's as if the Supreme Court judgment never took place. The contempt towards the court and towards the people for the Aadhaar project is historic.

In the entire decade of the existence of Aadhaar, they have not followed a single rule that the courts have ordered. And that is reflected in the report of the Comptroller and Auditor General (CAG). It's being acknowledged by a government auditor that the UIDAI is failing in so many ways.

But this is also a political issue. Aadhaar is being used to transfer subsidies to people with low incomes, whether it's for a gas cylinder or for agriculture. It is paying political dividends. How can this transfer be made safer and more efficient?
It's the poor who have been made vulnerable in all of this. The level of information asymmetry that exists in rural India and access to these institutions is so bad that even if people are affected, they don't even know that money has been taken from their accounts. If they know, they don't know what to do about it.

Yes, it's a political problem. Politicians want to use DBT to send money to people but nobody is saying to stop this. People are only saying that you fix some of the inherent problems associated with DBT and that you don't force this on everyone.

The question is, who is forcing it? There are multiple interests at play. You have the IT industry forcing this on richer populations because they want to acquire them as potential consumers for the financial technology industry.

For the poor it's actually the MHA who wants to understand who the population is. This idea of preventing fraud, or preventing money laundering, is also from the terror funding angle or foreign funds angle to track how the money is flowing. They want to

understand who is funding whom in a host of different scenarios.

So, it's very unlikely that this project is going to disappear.

But how do you fix this? Is voice technology for the poor a solution? So, if you are using your Aadhaar for ration, the machine can tell you it's being used for that purpose.

To fix the system you have to accept it has fundamental flaws. The RBI and the UIDAI have to investigate it together because it is a financial problem and because there is an identity layer linked to it. Both the institutions have never accepted that a problem exists.

The recent UIDAI advisory asked people to use masked Aadhaars. This came into existence in 2017. From 2010 to 2017 almost every Indian got an Aadhaar. After demonetization in May 2017, I wrote this report that 130 million Aadhaar numbers are publicly available and anyone can get Aadhaar numbers from the government website. The UIDAI then woke up and said there is a privacy problem with Aadhaar also because a related case was being discussed in the Supreme Court and they somehow wanted to ensure it was not shut down.

It prompted the UIDAI to find a solution for the problem of identity theft and Aadhaar numbers being made publicly available so they came up with the masked Aadhaar number concept. Nobody is using it.

UIDAI has been posting a lot of these advisories on Twitter for a long time. It just so happened that this advisory was posted as a press release and that explains the coverage it got. If you go look, they have been saying lock your biometrics, use mAadhaar, follow certain safeguards. Masked Aadhaar is the solution they are proposing. Similarly, they are saying lock your biometrics through the mAadhaar app. Except, you need a smartphone to do that and much of rural India doesn't have that.

I think implementing the Supreme Court judgment of not forcing Aadhaar-bank account linkages is a good start. And if you have done so, there should be the option to delink it.

I think they can fix the technical side of issues with respect to the banking part. The RBI can mandate an extra check, not just an Aadhaar number and biometrics. The RBI has designed these micro ATM payments and regulates all of it. The UIDAI says it doesn't deal in money so this is not its problem. The RBI has been increasing security. There is a reason why we get OTPs for our credit cards.

But, when it comes to the Aadhaar project the RBI is silent because they too want to track the flow of money with Aadhaar numbers for PMLA requirements. This idea of national security and tracking money is making some of these institutions blind to the problems of the public.

Is there some level of regulatory chaos?

Absolutely. It's been there since the last decade. They wake up to the problem only when there is a public outcry and then they fix it. With respect to biometrics they are trying to improve devices and make some changes at the ABL level but none of them will fix the information asymmetry problems which exist when you give your biometric details and Aadhaar number.

Why and how this data will be used is something they are not telling us. The Supreme Court, in the right to privacy case, said there should be purpose limitation, a law, and you clearly need to say why this is being collected. There is no law for the Aadhaar bank account linkage either. They are doing it as part of the PMLA rules.

This still leaves out rural India?

There is a real problem in rural India. There is no access to banking systems and without that you aren't going to solve your poverty challenges. The banks are not interested in building banks and hiring people. The IT industry is saying we have a solution — apps are the only way. Which is not wrong, frankly. The problem is that you are forcing a broken solution.

A lot of people are using UPI where there are no banks. Great. The problem is that they are forcing Aadhaar even when an individual has access to UPI. That is where the problem is coming from — why are you forcing a particular instrument and why are you not looking at the fraud associated with it.

If you were to look at the gains and the problems and weigh all this up, what would your opinion be on Aadhaar?

As a critic I will say that the problems have been more. The question is, for whom? Not for the rich. They are happy with it. But for a middle class person or a poor person, it's a different story. As someone who has looked at this very closely, I think Aadhaar has been a disaster for Indian democracy. Not because of financial fraud or anything. You haven't as yet seen the effects of Aadhaar in all the debates around NRC and the push towards linking it with voting.

Telangana is the most digitized state in the country. All this digital ecosystem has created is a largescale surveillance mechanism more than any other state in India. There are advantages of a digitized society but there are also disadvantages.

In India, traditionally Indian capital has dictated policies and laws. Except that it's not about business anymore. It's about how Indian democracy or governance happens. I would look at Aadhaar from a governance perspective because it was a governance instrument. That's not how Mr Nilekani looked at it. He designed it as an economic instrument. ∎

LIBRARIES IN PRISONS ARE A GREAT ESCAPE

Experiment by BIMTECH has many takers now

Kavita Charanji
New Delhi

Photo: India Today/Chandradeep Kumar

People in jail say they find solace in reading and the library is a haven of peace

WHEN a senior IT professional found himself behind bars in Noida jail for two years, he was in abject despair. It was books that gave him solace, he says, during that dark phase of his life. "I was appointed caretaker of the prison's library. Prisoners would approach me for book recommendations. I singled out books based on their interests, mostly motivational literature," he recalls.

A voracious reader of spiritual books, he used his time in jail to read the *Ramcharitmanas*. He also read the novels of Munshi Premchand and Bhagwati Charan Verma and drama and poetry.

"Books helped alleviate my personal challenges, tension and depression. Religious literature sets a prisoner on a spiritual path and the wrongs committed can then be seen in perspective," he says.

The library at Noida jail is one of 14 libraries set up in 12 prisons across Uttar Pradesh (UP) and Madhya Pradesh (MP) by the Ranganathan Society for Social Welfare and Library Development (RSSWLD), a non-profit supported by the Birla Institute of Management Technology (BIMTECH) under its CSR programme.

"Prisoners fall prey to negative thoughts and their conversations with other inmates are similarly negative. The environment is hostile. They are away from their families and society. There is slim chance of shaking loose from black thoughts or feelings. But books act as a therapy," says Dr Rishi Tiwari, founder-secretary, RSSWLD, head librarian of BIMTECH and CEO of the BIMTECH Foundation.

The rehabilitation process for the IT professional, for instance, was very painful. But the RSSWLD team counselled him and gave him the strength to face society again. Before being in prison he used to work as a software engineer in an MNC. He has now joined another company.
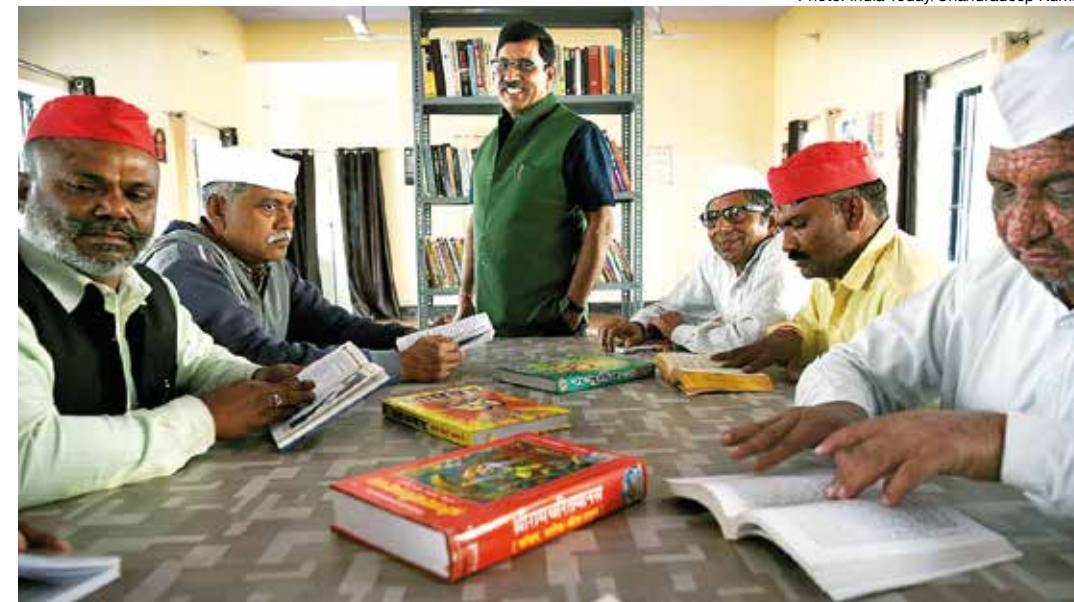
The libraries set up by RSSWLD in UP have proved to be so successful that requests for similar facilities have come from jail authorities in Rajasthan, Uttarakhand and Haryana. Two libraries for women prisoners have been set up in Gautam Buddh Nagar and Gwalior jails. A toy library has also been established in Gautam Buddh Nagar jail for the children of women prisoners.

"Jails are a microcosm of our society. The main objective of setting up jail libraries is to offer some hope to inmates that they can reform their life and start a new chapter after completing their imprisonment," says Dr Harivansh Chaturvedi, BIMTECH's compassionate director.

Dr Harivansh Chaturvedi

Jail inmates are mostly from poor, backward, oppressed tribal communities and minorities, he says. There have been instances of suicides and violence behind the forbidding walls of prisons because little effort goes into reforming prisoners.

A former prisoner in Gautam Buddh Nagar's district jail recalls that the prison's library was a haven of peace for her. A former HR manager, she read a variety of motivational books that pulled her out of the depths of despair into which she had sunk. She also went through biographies of freedom fighters like Subhas Chandra Bose.

"Conversations with other women inmates always turned negative as we were all steeped in negativity. The library diverted our minds from our misery. It helped us realize that life was not over, that the future could also be positive." Guided into the mainstream by RSSWLD, who she discovered through an online search, she is now a project consultant.

Tiwari has steered RSSWLD from the time it was set up in 2009. He was mentored by Dr Chaturvedi. Students at BIMTECH are encouraged to be socially conscious citizens. Community outreach by students, faculty and staff began with the opening of rural libraries in villages near its campus in Greater Noida. However, the 14 libraries proved unsustainable because villagers were simply not interested in reading books.

Then in 2012, a report appeared in *The Hindu* in its Chennai edition about district jails in Tamil Nadu that roped in prisoners to cook food which could be sold in cities near the jails. Inspired by the report, RSSWLD too decided to come up with ideas that would give inmates a second chance in life. Tiwari met the jail superintendent of Ghaziabad Jail, Dr Viresh Raj Sharma, and told him about RSSWLD's rural libraries. Sharma was interested in having a library in Dasna Jail in Ghaziabad. Dr Chaturvedi supported the idea though some faculty members were sceptical about an academic institution venturing into a prison.

The first BIMTECH library was set up in Dasna Jail in 2012. After analyzing a survey to determine the literary tastes of inmates, RSSWLD bought books of eminent authors like Premchand, Mahadevi Verma, Mannu Bhandari, Mrinal Pande and many others. The Dasna Jail venture, RSSWLD's largest project, now has a "beautiful library" of some 4,000 books, says Tiwari.

As word about the library spread, the Lucknow Jail authorities approached RSSWLD to set up a similar facility. The libraries are stocked with Hindi books authored by Premchand, Sarat Chandra Chattopadhyay and other eminent names. Many prisoners like to read books on subjects like competitive exams, religion, motivational works, legal advisories, skill development and vocational education. "The prison libraries are better than any public library," says Tiwari with pride.

Even mentally disturbed inmates of jails find refuge in the libraries. Tiwari recalls how, on a visit to Meerut Jail, he came across a prisoner who looked decidedly abnormal. The caretaker of the library, a convict serving a life term for murder, informed him that the inmate suffered from severe depression. In desperation, he would bang his head against the prison walls and get beaten by other inmates who didn't know how to control him. The jail authorities sent him to the library. Though illiterate, he got fascinated by volumes of the *Ramayana* and would sit silently, gazing at the pictorial depictions of Ram and Sita. He routinely appeared in the library as soon as it opened at 9 am. Slowly, he opened up and asked the caretaker to explain the *Ramayana* to him. "He became hooked on the library and is much calmer," says Tiwari.

The success of the libraries depends on the commitment of the jail administration to prison reform. Dr Sharad Kulshrestha, former IG Prisons, UP, now based in Lucknow, was particularly supportive of RSSWLD and encouraged Tiwari to establish more libraries in the state.

In a telephonic interview, he pointed out that RSSWLD provided clear direction to the prison libraries which earlier lacked a connect with inmates. "When RSSWLD did a survey, many prisoners said that they wanted a wider selection beyond just religious books. They asked for motivational literature, detective novels, poetry. Books were bought according to the tastes of prisoners. They were trained in how to maintain and run the libraries," says Kulshrestha.

The libraries have had a salutary effect on prisoners. Fewer prisoners repeat crimes on release. Fewer cases of suicide and violent infighting are reported, says Kulshrestha. Some inmates have improved literacy levels. But, he says, there is still much ground to cover. Many overburdened jail officials do not view libraries as a priority. Besides, prisoners are reluctant to share any information about themselves or enter into any kind of dialogue with outsiders in the belief that it may be used against them in the course of the legal process. ∎

Girls learn, boys listen

Subir Roy
Kolkata

T HE ladies who run the civil society organization, Sukriti, recently went to address the general assembly of the Krishnachandrapur High School at Mathurapur, near the Sundarbans in South 24-Parganas. They had before them a distinctive sight — a huge gathering of several thousand youngsters.

Being a coeducational school, it was normal for both boys and girls to be in an assembly. But what was unusual was the topic: 'menstrual hygiene'. What did boys have to do with it? A lot, it seems, according to the highly progressive headmaster of the school, Chandan Kuman Maiti.

His contention was that there should not be any hide and seek about menstruation, a natural regular occurrence among women. Boys, as much as girls, should take it in their stride. Menstruating adult women should take it as a regular routine in their lives as should boys with menstruating classmates among them.

What is noteworthy is that the huge high school with very disciplined students is a free, state government-funded institution which imparts teaching in the local Bengali medium, not an upmarket English-medium city school run by progressive thinking. As the ladies soon realized, it was the progressive minded and competent headmaster who made all the difference.

Sukriti, a registered society, is now a 10-year-old organization and its chosen mission is two-fold — to empower local women from the lowest strata of society so that they can earn a decent living and be independent, and to enable them to practise proper menstrual hygiene by knowing the drill and having the necessary wherewithal.

The organization was founded and is still being run not by progressive youngsters but retired women professionals who wanted to do something useful after they retired. Uma Sen, the president, was a chief manager in a public sector bank and Dipali Saha, the secretary, was a senior manager in a corporate. They were later joined by Mira Sen (the two Sens are spinster sisters), the treasurer, who was a Class I officer with the central government.

The organization works mainly in three West Bengal districts — South 24-Parganas, Purulia and Medinipur — among rural and urban women. It runs skill development programmes for girls so that they can become nursing assistants or practise tailoring, embroidery and the highly rated traditional craft of *kantha* stitching. Most recently, it has started a bakery where girls can pick up the skills to make and sell their own products.

Sewing machines are given to successful tailoring students who can work independently from home to earn a living. For this they are also given a bit of basic business education like how to maintain accounts and market their products. Those who wish to take up a job are helped to find one. Girls who have completed the nursing assistant training are placed with government hospitals for a three-month on-the-job training.

The sanitary napkins that Sukriti makes are first distributed free in a particular area and then, after women have got used to using them, at ₹10 for a packet of eight. In Purulia, where the mostly tribal people are particularly poor, the packet is priced at ₹5. The production cost for a packet is ₹20.

It also makes maternity pads and has a close working relationship with the well-known non-profit, the Ramakrishna Mission Seva Pratishthan hospital, where maternity pads are supplied for patients at ₹50 per packet of 10. The aim of making maternity pads and selling them to hospitals is to develop a steady income stream.

The campaign to spread the message is done through schools and village contacts and group meetings where napkins are distributed free in order to help the women develop the habit of using proper napkins. Once they do so, napkins are sold to them at well below the market price.

Retired women professionals got together to empower local women

Chandan Kuman Maiti, the progressive headmaster

What is most heartening is that the adoption rate, the percentage of girls deciding to follow the right practices, is very high, at around 75 percent, and they are willing to pay a small sum for it.

The women who run Sukriti bring to it their own skills. Other than the Sen sisters, a key role is played by Saha, the treasurer. She helps liaise with firms who are willing to use their corporate social responsibility (CSR) budget for a cause like this. Exide, for example, is impressed by the work being done and has decided to help out.

As for its own staff, Sukriti has two full-time employees and makes use of about a dozen part-timers as and when the need arises. The whole idea is for the organization to be able to run on its own with the skills available within itself and the funding and revenue it is able to come by. One person is made responsible in each area for sales.

For those involved with Sukriti, working with village women to skill them has been a learning process. They found that poor village women were not at all conscious about menstrual health and used things like rags which sometimes became a source of infection and illness.

From this knowledge was born the idea of starting a unit to make sanitary napkins. But it proved very difficult to find a place in a rural area to set up the unit. Eventually it was housed in the organization's own office in Kolkata.

Initially it took a lot of effort to establish a system to churn out standardized products. But once this was done and the product was found acceptable, the organization adopted the brand name "Sahelee" for the napkins. This financial year Sukriti plans to spend around ₹15 lakh which will be raised from donations (individual and corporate) and sales proceeds. ■

Mango in a big hurry lasts just three days

Shree Padre
Ankola (Karnataka)

WHAT does a farmer do with a haul of juicy mangoes that have a shelf life of just one day? The easy thing to do is to dump those mangoes and grow the pricy Alphonso or Totapuri instead.

But that's not a choice the farmers of Ankola *taluk* in Uttara Kannada district of Karnataka want to ever make. The Kari Ishad, the mango with the short shelf life, is the pride of their *taluk*. It is also on the verge of acquiring Geographical Indicator (GI) status.

"It is raw today, ripe tomorrow and overripe the day after," remarks Venkatesh G. Naik of Shetgeri Cross who has been growing Kari Ishad and other mango varieties for three generations.

Farmers in Ankola do grow Alphonso, Totapuri, Neelam and other commercial varieties. They follow some good practices too: mangoes are naturally ripened with hay, harvesting is done with a net attached to a plucker, and mangoes are graded before being marketed.

One strange custom is that they sell mangoes by the dozen and not by the kilo. During the mango season, a daily morning market springs to life in the heart of the town. Farmers and middlemen bring mangoes in large baskets. Brokers, not consumers, arrive to buy the fruit in bulk and dispatch it to Hubli, the only market for Kari Ishad mangoes. Some mangoes go to Karwar too. Although Sirsi town is nearby, no supply chain has been created so far. Hundreds of women sell Kari Ishad by roadsides.

Kari Ishad is round and resembles the Rumani and Mundappa varieties. It is bunch-bearing and yields a good crop. Three mangoes, on an average, make one kilo. The crop season starts in March and ends in May. This variety grows well only in the local micro-climate.

A TWO-DAY FAIR
The Ankola Belegarara Samithi (Ankola Farmers Committee) held a two-day mango fair over May 21-22 to draw attention to their mangoes and attract buyers. About 25 mango growers took part. How to sell their mangoes was the question uppermost in their minds.

According to Dr B.P. Satish, deputy director, horticulture, Sirsi, out of 683 hectares of mango cultivation in Ankola *taluk*, Kari Ishad is grown on around 75 hectares. Its yearly production is around 750 tonnes. Popular commercial varieties are grown on 150 to 200 hectares and their annual production is around 2,000 to 2,500 tonnes.

Retired bank manager V.H. Naik has about 60 mango trees in his orchard. Apart from Kari Ishad, he has well-known commercial varieties and a local variety called Chalti. He earns, on average, ₹30,000 every year by selling his crop to middlemen."We get a passable price only if there are no summer rains," says elderly Devaraya Naik, who has 50 mango trees and earns on average ₹50,000 annually.

"Each household in Ankola has one or two mango trees. There are families which own 30 to 50 trees too," explains Naik. "At the start of the season, Kari Ishad is priced at ₹10-15 per piece. But once the season picks up, we end up with only ₹5 per piece."

"There are no attempts at value addition," points out Ramachandra D. Hegde, secretary, Ankola Belegarara Samithi. Eateries in Ankola town serve mango juice for ₹30 per glass during the season. That's it.

"Some small farmers buy mangoes from their neighbours on a contract basis. But one rainfall is enough to shoo away buyers. Taking the fruit to nearby towns is not practical due to transport costs. There should be more buyers for our mango crop. Because of all these problems, only about 30 percent of our crop gets sold."

Nagaraj V. Naik, president of the Ankola Belegarara Samithi, says his family has figured out a route to successful selling. "We understood that if we harvest mangoes ourselves and market the fruits directly, we will get better returns. This time, after the mango fair was over, we received orders from faraway places. Sitting at home, my dad sold 800 fruits to distant customers. We sent parcels by bus and some customers came and picked up the mangoes. We got a much better price of ₹200 to 250 per dozen."

Venkatesh G. Naik has also learnt a few trade secrets. His family stopped selling to middlemen since his grandfather's days. They handle sales and send their mangoes directly to Hubli. Recently they started supplying to nearby Karwar. This year, instead of dispatching ripe mangoes, they sent unripe ones. "This prevents the usual 10 percent wastage during transport and handling. In addition, we don't need to check the mangoes for ripening every day. This process means considerable labour for us. My relatives have also started sending unripe mangoes to the market," he observes.

Venkatesh has about 225 mango trees of different ages and varieties, spread over six acres. He says they get 20 percent more money by avoiding local middlemen and sending the crop at unripe stage. Their average annual income from sale of mangoes is around ₹2 lakh.

Another innovation Venkatesh has successfully implemented is 'dwarfing' or pruning huge old mango trees. He pruned three of his 35-year-old trees years ago. "From the third year you start getting a good crop again. The fruits are healthier and bigger. The biggest advantage is easy harvesting.

"The very next year after pruning, lots of tender branches emerge. You have to be careful to cut the weaker ones to make room for aeration and light. I got 60 percent of the from the third year after pruning."

Although this is a very useful technique, none of the farmers has shown interest in it. Perhaps the horticulture office or local Krishi Vijnan Kendra (KVK) could conduct a demo or extension programme on this method.

COLONIAL FACTORY
Oriental Canneries is the lone factory here that produces mango pulp only from Kari Ishad mangoes. Founded in 1908, during colonial rule, the factory functions with machinery dating back to the Raj.

Its current owner, 71-year-old Pundalika P. Prabhu, bought the factory in 1970 and it has been producing pulp since 1975. Its average annual production is 5,000 to 10,000 tins of 850 grammes each. Local ice-cream parlours, who convert the pulp into mango juice, are its main clients. A small percentage of pulp is bought by housewives who serve it with *puris* or chapattis.

In 1908, when the British started Oriental Canneries, 20,000 tins of pulp used to be shipped to England from Ankola every year.

The factory had been shut for three years and resumed operations this year. The company buys Kari Ishad mangoes at the rate of ₹400-500 for 100 mangoes. It produces mango pulp for just three weeks before closing again.

The pulp goes to Sirsi, Honnavar, Kumta and other nearby towns. "If there is more demand, we are ready to produce more," says Prabhu.

According to Nagaraj Naik, the Ankola Belegarara Samithi plans to organize another mango festival next year. To attract more visitors they will need to expand their range and include value-added products like freshly prepared *aamras*.

"The people of Ankola are sentimentally attached to their local Kari Ishad mango. It is supreme for them. But if you view it dispassionately, there are many other commercial varieties that are far superior to this one," points out Dr Satish. "Kari Ishad's biggest limitation is that it has to be consumed on the very day you buy it." ∎

Contact: Nagaraj Naik, president, Ankola Belegarara Samithi – 94481 38788

Vendors sell the Kari Ishad mango by the dozen so that it attracts buyers and sells quickly

Oriental Canneries, founded during the British Raj, is the only factory here which makes mango pulp

The Ankola Farmers Committee: Ramachandra Hegde (fourth from left) and Nagaraj Naik (fifth from left)

Samita's World
by SAMITA RATHOR

WHAT'S THE REAL MEANING OF LIFE?

THAT CHANGE AIN'T A CONSTANT ANYMORE!

Grasscutting has got its champions

Rakesh Agrawal
Dehradun

A lively grasscutting competition which caught the imagination of village women in Uttarakhand is being revived after a gap of five years by the Chetna Andolan, an activist group founded by late social worker Trepan Singh Chauhan.

The Ghasiyari Pratyogita was started by Chauhan to honour the women of the hills for their labour and their role in conserving the state's Himalayan ecology. Hundreds of women joined the competition. They gained recognition and got generous prizes. The popularity of the competition caught the eye of the state government.

The competition is likely to be held in December this year for the third time. "Because of the five-year lag we need to start from scratch," says Vinod Baduni, Chauhan's long-time friend and colleague. "It won't be easy, of course, but we've zeroed in on the block and district. We are going to hold it in Bhilangana block of Tehri district later this year. We have formed committees to spread awareness and to raise money," adds Shankar Gopalakrishna, a member of Chetna Andolan.

Chauhan was well known for the agitation he led in 2008 against the Phalenda hydro-electricity project in which women took part in large numbers. His NGO, Chetna Andolan, was formed in 1994 to fight for the people's rights to *jal, jangal* and *zameen* (water, forest and land). Chauhan was very appreciative of the role women played in conservation and protection of forests.

Across Uttarakhand it is women, organized into *van panchayats*, who govern patches of forest near their small villages. "They collect and carry home fodder, wood and water. But they do so with great responsibility. When they cut grass, they ensure that young saplings are not harmed. If they are collecting wood, they gather only dry twigs," says Neetu Juyal, sarpanch, Purkal village in Dehradun district.

In 2011 Chauhan mooted the idea of holding a grasscutting competition. Everybody laughed at him. "But he held it all the same and it drew attention as an innovative idea. It even led to the state government devising schemes especially for the ghasiyaris or grasscutters," says Gopalakrishna.

The first Ghasiyari Pratyogita was held in Bhilangana block of Tehri district in November 2015. Around 112 gram panchayats, comprising about 200 villages, took part in the initial round. The second round was held in December 2015 and the last round was held in January 2016. Altogether 637 *ghasiyaris* joined the competition. Twenty six women qualified for the finals which were held in Kothiyada village in Tehri district.

Recalls Ram Lal, pradhan of Kholakemar village in Tehri district, "The women had to cut as much grass as they could in two minutes, ensuring no green saplings were harmed. The grass was then weighed. This was followed by a question-answer session in which the women were asked about livestock, forests and their role in hill ecology."

The three winners of the 2016 grasscutting competition

Participants have to cut grass and answer questions

The top three were rewarded in a well-attended ceremony in Dehradun. "Never in my life was I so respected and honoured," said Raija Devi of Amarsar village in Tehri district, who won the first prize of ₹1 lakh and a gold tiara of 16 *tolas* (about 187 grammes) which was placed on her head.

The rules of the competition were rather stringent. "Every competitor gets only two minutes to cut grass. She gets 10 points for every kg of grass she cuts. Fines are imposed if she gets in any competitor's way or cuts green trees or saplings. We followed all these rules," recalled Yashoda Devi of Mald village in Tehri district, who was the first runner-up and won ₹51,000 and a silver crown of 16 *tolas*.

"There is also a tough verbal exam in which

we were asked several questions about forests, livestock and their impact on our forests," said Abali Devi of Anvan village in Tehri district, who won the third prize of ₹21,000 and a silver crown of 10 *tolas*.

The next 10 competitors were given ₹10,000 and a silver coin each and the following 17 women each got a consolation prize of ₹5,000 and a silver coin.

It was tough to pick the winners. "We kept a close eye on them, ensuring they followed every rule meticulously. The real challenge was the interview as, unlike measuring the grass they had cut, it was rather subjective," said Kamla Pant, convener of the Uttarakhand Mahila Manch, who was a member of the jury.

Because of its uniqueness, the grasscutting competition was noticed by many ecologists and activists in Uttarakhand. Rajiv Lochan, editor of *Nainital Samachar*, says the competition was memorable. "It established that hill women spend hours collecting fodder but they never destroy the forests. We should have honoured them much earlier."

The success of the first Ghasiyari Pratyogita in 2015 paved the way for the second one which was held a year later in Akhodi village of Tehri Garhwal district in December 2016. This time, more than 1,000 women participated.

Forty-year-old Vimla Devi of Chilyal village in Tehri district collected 4.14 kg of grass, scored 171.41 points and won the first prize. She says she used the money to pay for her children's education and for the treatment of her ailing husband who was at the time working in a hotel in Chandigarh. Second-placed was Gyansu Devi, 50, of Dhansani village, while the third prize went to Indira Devi of Akhori village. Thirty-one of the final 34 in the second round of the competition also got consolation prizes, as before.

All expenses for the prizes and the meeting were borne by local contributions and donations from individuals.

Tragically, Chauhan died in August 2020, succumbing to a neurodegenerative disorder similar to the illness of the scientist, Stephen Hawking. It destroyed his ability to move, speak and even breathe.

However, the *ghasiyari* event had roused the interest of the state government. In November 2021, Home Minister Amit Shah announced the launch of the Mukhyamantri Ghasiyari Kalyan Yojna just a few months before the assembly elections. Under it, animal-rearers could collect 25 to 30 kg of fodder in vacuum bags from government stores, without going into the forests.

The scheme was severely criticized by politicians, activists and social workers for being politically motivated to lure women's votes and as a marketing gimmick. ∎

Photo: Civil Society/Ashoke Chakrabarty

Is feeding dogs on the street a solution? Kind hearted people like Pankaj Das, a retired bank employee in Bhawanipore in Kolkata, do it any way

THE STRAY DOGS TANGLE

Do we love them enough to get them off the streets?

Civil Society News
New Delhi

A little girl, all of three years old, playing with other children in a park in Moti Nagar in west Delhi, is mauled and killed by a marauding pack of street dogs. Her father, a gardener, is working nearby in the same park, but can't save her.

In DLF Phase-2, a neighbourhood in Gurugram, across the National Capital Region (NCR) from Moti Nagar, a 14-month-old girl is pounced upon by a stray dog and bitten in the leg. Her parents, who are taking her out for an evening stroll, aren't able to prevent the attack.

These two incidents of stray dogs attacking children happened between December 2021 and March 2022. They show the regularity with which attacks on people occur.

There are seven million dog bites in India in a year, according to government figures. Deaths from rabies are put at 25,000 in a year. Both figures are likely to be actually higher because of underreporting and poor gathering of data. It is not known how many stray dogs there are in India. Estimates vary and run into tens of millions. There is also no definitive record of house dogs.

Strays come under the Animal Birth Control (Dogs) Rules, known as the ABC Rules. Under these rules dogs are to be vaccinated and neutered, but can't be removed from the streets even if they are aggressive and have bitten people.

The rules seek to reduce the population of stray dogs and incidence of rabies but clearly neither goal is being achieved though it is 20 years since the rules came into force.

As the population of strays has grown, conflicts over them have multiplied. There are dog lovers who feed strays and don't want them removed. But equally there are other people who feel threatened and see strays as a menace.

Several cases have been filed in courts resulting in contested orders and judgments. The Supreme Court has had to step in and bring all these stray-dog related matters under its purview. It is expected to hear a bunch of cases in July. Among them is a writ petition filed as public interest litigation (PIL) by the Humane Foundation for People and Animals (HFPA), which says that keeping stray dogs on the streets is being unkind to them and unfair by people. They should either be adopted or removed to well-managed pounds as is done elsewhere in the world. It also calls for firm regulation of dog ownership and breeding.

The big question is whether dogs should be on the streets at all. Who should be held responsible when they attack people and sometimes take lives? Biting and mauling can be a traumatic experience even if a dog is neutered and vaccinated against rabies. Better governance is required because the problem can't be solved by people acting on their own, the situation having spiralled out of control over the years.

With strays being in millions, adoption can hardly be a solution. On the other hand, left out on the streets, without specific owners, dogs can turn wild roaming around in packs. Preventing the spread of rabies and innumerable zoonotic diseases is also a challenge when they are loose.

A dog's temperament, mood swings and response to different situations are difficult to understand. There are those that are fierce in nature, but even docile dogs bite — and cause serious injuries when they do.

A dog taken into a home and bonding with people can be completely tame. But there are limits to adoption. The Fernandes family in Gurugram, for instance, touchingly looks after dogs with disabilities. Yet ask them to take in one extra dog more than they can handle and they will throw up their hands. In fact, dogs in need of shelter currently far outnumber the homes that may want to take them in.

Internationally, the norm is that dogs cannot be allowed to roam free and harass people. They are picked up and kept in pounds till an owner shows up. If not claimed or adopted over time, they are euthanized.

House dogs, too, in most countries have to be trained so that they don't make a nuisance of themselves. Forget biting and attacking people, they are not allowed to bark loudly and incessantly at odd hours. Owners of pets are read out their responsibilities and are required to know how to manage their animals.

IN THE COURTS In India, a combination of poor governance and unrealistic regulation have turned the streets into a conflict zone between dogs and human beings. It is a conflict that has also extended to human beings taking on one another, at times violently, going to the police and filing cases in courts. Of the disputes the most contentious relate to the feeding of strays in public places.

> **Internationally, the norm is that dogs cannot be allowed to roam free and harass people. They are picked up and kept in pounds.**

Among the cases before the Supreme Court, the PIL filed by the HFPA is especially interesting because it argues that keeping dogs on the street in poor conditions is to ill-treat them as well as endanger people.

The HFPA's founders are T.A. Ramkumar and Meghna Uniyal. Their PIL was filed in 2020, but it comes in the trail of a long list of litigation. In 2007, Dr Rozario Menezes and his organization, People for the Elimination of Stray Troubles, went to court in Goa. This case by Dr Menezes ended up in the Bombay High Court along with sundry other cases filed between 2005 and 2008.

In 2009, a PIL was filed in the Supreme Court by the Animal Welfare Board against the People for the Elimination of Stray Troubles. The board went to the Supreme Court again in 2011 and got a Karnataka High Court order overturning the ABC Rules stayed.

In 2015 the Supreme Court said high courts were not allowed to hear cases on the issue. And in 2016 when people in Kerala began killing stray dogs after a series of instances of dog bite, the Supreme Court appointed the Sri Jagan Committee to decide compensation.

PRO-DOG, BUT NOT STRAYS The PIL by the HFPA has gone deep into the problem of stray dogs from a compassionate position. The HFPA says people who truly love dogs should work towards saving them from a miserable existence on the streets by taking them into pounds, getting them adopted and, when required, euthanizing them.

The PIL looks at examples from other countries and suggests that India implement global best practices. Realizing that solutions are required, the HFPA offers a detailed "model policy" for dealing with the stray dog problem.

The model policy promotes responsible pet ownership and breeding, tracking of animals, better regulation and capacity enhancement in

Photo: Civil Society/Ashoke Chakrabarty

Strays become a pack of wild dogs when let loose on the street. And below: They are disciplined and restrained dogs when adopted as pets

Photo: Civil Society/Lakshman Anand

municipalities among other things. *(See box on Page 20.)*

ARTICLE 21 VIOLATED? The basic legal contention of the PIL is that the Animal Birth Control (Dogs) Rules or ABC Rules, are violative of Article 21 of the Constitution that guarantees every citizen the right to a life with dignity, in a safe and healthy environment free from the dangers of disease and infection.

It points out that the Supreme Court itself has held that health, safety, preservation of sanitation and environment fall within the purview of Article 21. But keeping dogs on the streets endangers the health and safety of citizens. The PIL cites the government's own figures of seven million dog bites and 25,000 rabies cases in a year to highlight the extent of the problem.

The PIL argues that as the only national policy on dealing with stray dogs the ABC Rules are not working. It calls the rules both a "danger and nuisance for citizens". They require municipal authorities and animal welfare organizations to release dogs back on the streets in the same areas where people had a problem with them biting and being a nuisance.

The PIL also points out that the rules misinterpret World Health Organization (WHO) guidelines. Far from allowing dogs to be on the street, the WHO calls for responsible pet ownership and going to the source of the stray dog problem. The WHO is for sterilization with firm regulation and civic management.

The PIL places much emphasis on responsible ownership and breeding because this is from where the problem begins. Put simply: people bring dogs into their homes and then when they can't handle them put those

dogs out on the streets where they multiply. In the absence of controls, India's problem with strays has only become more complex.

ABC RULES AND THE PCAA The Prevention of Cruelty to Animals Act (PCAA) was brought to Parliament in 1960 as a private member's bill by Rukmini Devi Arundale, the dancer, who was an animal lover.

Arundale wanted the law to protect domestic animals against abuse and abandonment. She wanted civic authorities to take responsibility for animals that were let loose so that they didn't suffer.

The ABC Rules were drafted 40 years later in 2001 by Maneka Gandhi while she was the minister for culture, which in itself is odd. Why should the rules have come from the ministry of culture?

The PIL argues that the rules were supposed to facilitate the implementation of the PCAA, but they actually run counter to its provisions and spirit by allowing dogs to be left on the street. Rules can't run counter to the law they seek to implement, it is argued in the PIL.

The ABC Rules legalize straying and create a category called "street dogs" for whom no one can be held responsible. These dogs must fend for themselves and, in reality, they die of starvation, thirst, disease and accidents, says the HFPA in its PIL. The PCCA, on the contrary, seeks to ensure that the animals are owned and cared for.

There are several other counts on which the ABC Rules are also questioned. For instance, they are not in consonance with municipal laws that do not permit straying. They also contravene the Indian Penal Code (IPC) when stray dogs bite and injure people.

NOT WORKING The rules are based on the assumption that vaccination, sterilization and feeding of dogs will restrict them to their own territories and over time their number will dwindle.

But the rules are not working. In the 20 years that they have been in force, there is not a single example of a comprehensively successful sterilization effort in India that has brought down stray dog populations.

Photo: Civil Society/Umesh Anand
Upside down love: A man plays with strays while hanging upside down in a park.

As the numbers have increased so have attacks and there are gory examples of man-animal confrontation.

The reasons for attacks by dogs aren't always definable. For instance, why were the two small children in the examples above attacked? There is no ready answer.

Sometimes a dog may attack to protect its territory. Or when it is scared. Dogs in heat, and buoyed by hormonal surges, can also be dangerous and out of control.

Then again, a hungry dog or one that is eating will tend to snap. As the old saying goes: Don't come between a dog and his bone! Dogs in packs tend to be aggressive and there is invariably a pack leader.

To further complicate matters, people seeing dogs adrift come forward to feed them in one way or the other. They put out leftovers from their homes.

There are also efforts to feed them regularly. These are good-hearted gestures, but no substitute for a caring system. They don't solve the larger problem of what to do with an ever-increasing population of stray dogs.

MAHATMA'S ADVICE The stray dog issue is not a new one. Mahatma Gandhi weighed in on the issue, saying: "The multiplication of dogs is unnecessary. A roving dog without an owner is a danger to society and a swarm of them is a menace to its very existence."

He described the feeding of stray dogs as "misplaced compassion" by people who didn't understand *himsa* in the first place and were therefore imperfect champions of the principle of *ahimsa*.

"If we want to keep dogs in towns and villages, in a decent manner no dog should be suffered to wander," says Gandhi. "There should be no stray dogs even as we have no stray cattle." *(See box on Page 19.)*

PUNE CLUB The HFPA believes that it is important to strike a balance between people's rights and those of animals. But in the absence of adequate governance, it is not easy.

Ramkumar tells the story of the Pune Club of which he is a member. The club set out to be kind to stray dogs entering its premises by feeding

Photo: Civil Society/Ajit Krishna
Street scenes: Feeding of dogs is often random and without responsibility

Photo: Civil Society/Ajit Krishna
How dogs react is not easy to understand. In this picture strays chase a car

and looking after them. Food used to be especially cooked for the dogs and a caretaker too was appointed, recalls Ramkumar.

However, as their presence grew and they began occupying the common spaces meant for members, the club was forced to act. Dogs chasing members on the jogging trails and snapping at their heels was particularly uncomfortable.

"I asked the club's president why he didn't do something about the dogs. He said there was nothing he could do because there were some members who wanted the dogs housed and fed," says Ramkumar.

Over time, as more members felt threatened, the club was forced to stop feeding the dogs and once the food stopped, the dogs stopped showing up as well.

The Pune Club's example is typical of feeding initiatives. When strays know there is food available they turn up and as their numbers increase uncontrollable situations develop.

"I live on Boat Club Road in Pune where there aren't many stray dogs," says Ramkumar. "But even there we have had cases of dogs biting and threatening residents on the street and yet no one was willing to act."

Ramkumar is head of special situation investments at Tata Capital. He came across Meghna Uniyal when he read an article written by her, Janaki Lenin and Abi Tamim Vanak on the issue of stray dogs. Her rational and practical approach that took human beings and their safety into account appealed to him.

Unniyal is based in Gurugram and has studied law at Symbiosis International University in Pune. As a student in Pune, she worked with the Blue Cross. So, she is a bona fide animal lover with a broader point of view similar to Ramkumar's.

> **Attacks by dogs have increased for reasons that aren't always definable. A dog may attack when it is being fed or it is scared.**

When Ramkumar got in touch with her, Uniyal gave him a whole lot of material to read on the issue. It impressed her that he came back to her after having gone through the material in great detail.

They then began working together. HFPA was formed by them in 2018. They realized it was important to provide a a solution to the problem of stray dogs. Soon a model policy began to take shape. It took more than a year to draft and they have also patented it.

Uniyal currently teaches English. Like Ramkumar she feels strongly that the problem of strays hasn't been properly addressed. "I have no dog now because my husband and I are moving quite a bit. My cat died a couple of years ago. But I'm a lifelong dog and cat owner. I've kept pedigrees. I've kept rescued animals. I've picked them up from the road, from the shelter," says Uniyal.

It was while working with the Blue Cross in Pune in 1998, then a student in her twenties, that the trend of picking up strays, sterilizing them and putting them back on the street began.

In 2000 the draft ABC Rules were circulated and she sent in objections, but to no avail. Then in 2001 the rules were passed and it became official policy for NGOs to sterilize dogs and put them back.

"I took this up with the Blue Cross management, saying, listen, this is a terrible idea. Why are we doing this? These are homeless dogs. I don't understand this policy at all or how it works. And they said, 'Look, we have been asked to do it. We're getting funding from it.' That was the end of the story," remembers Uniyal.

"I wrote to the Animal Welfare Board of India, and said I'd like to know about this policy. I don't understand it. They said these are the WHO guidelines. So I said, Okay, may I have a copy of the WHO guidelines? They said, We don't have a copy, you ask the WHO," she says.

So she wrote to the WHO and received a hard copy of the guidelines

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Gandhi on stray dogs, *ahimsa* and society

AS FAR back as 1926, a mill owner in Ahmedabad approached Mahatma Gandhi for his opinion on the extermination of 60 stray dogs that had turned rabid on his mill premises. The mill owner said he had to kill them to save human lives.

"What else could be done," Mahatma Gandhi said to the mill owner who quoted him to the people who were opposing putting the dogs to sleep.

When the Mahatma was asked by the Ahmedabad Humanitarian League if this was indeed the opinion he had given, he said it was and took up the issue in great detail in *Young India* in the larger context of *ahimsa* and non-violence.

"Roving dogs do not indicate the civilization or compassion of the society; they betray, on the contrary, the ignorance and lethargy of its members," Gandhi said in the course of discussing the issue.

"The dog is a faithful companion. There are numerous instances of the faithfulness of dogs and horses," said Gandhi. "But that

means that we should keep them and treat them with respect as we do our companions and not allow them to roam about. By aggravating the evil of stray dogs we shall not be acquitting ourselves of our duty to them."

Calling the keeping of stray dogs on the street a "shame", Gandhi said a humane person should set aside a portion of his income and give it to a society that takes care of dogs.

Alternatively, he should look after one or more dogs himself.

"If he cannot do so, he should give up worrying about the question of dogs and direct his humanity towards the service of other animals," Gandhi said.

He denied that he was for the extirpation of dogs as an "absolute duty". He was only for killing some dogs as a "duty in distress".

"When the State does not care for stray dogs, nor does the *mahajan*, and when one is not prepared to take care of them oneself, then, and if one regards them as a danger to society, one should kill them and relieve them from a lingering death," he said.

Gandhi bemoaned the "bad plight" of dogs on the streets, saying: "It is my firm conviction that this sorry plight is due to our misconception of *ahimsa*, is due to our want of *ahimsa*."

Gandhi said: "If we persist with the practice of keeping stray dogs undisturbed, we will be faced with the prospect of either castrating them or killing them."

The mill owner, Gandhi observed, was not a recluse living in the wilderness but a city dweller who was responsible for the protection of people under his care.

"If he kills the dog, he commits a sin. If he does not kill it, he commits a graver sin. So, he prefers to commit the lesser one and save himself from the graver," said Gandhi.

"To destroy a rabid dog is to commit the minimum amount of violence," opined Gandhi.

"Even if those who feed stray dogs consented to pay a penalty for their misdirected compassion, we should be free from the curse of stray dogs," Gandhi said.

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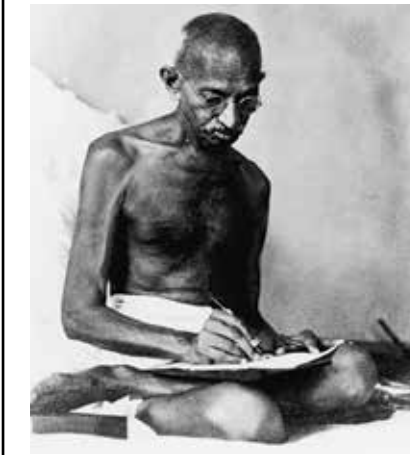
Proposed policy: Registration, pounds...

THE HUMANE Foundation for People and Animals has proposed a national policy on management of the dog population and control of rabies in India.

The policy emphasizes the responsibility of the government but also involves animal welfare organizations.

It draws extensively on best practices and laws across the world and seeks to adapt them to Indian requirements.

It has been formulated by T.A. Ramkumar and Meghna Unniyal, who are co-founders and directors of the foundation, and Dr Abi Tamim Vanak, Fellow at the Ashoka Trust for Research in Ecology and the Environment (ATREE).

The proposed policy is part of the PIL filed in the Supreme Court. It goes into great detail and needs to be read in its entirety. Given very briefly below are just a few of the range of issues that it comprehensively addresses.

REGISTRATION: The policy suggests that all dogs over the age of three months should be registered with the Local Authority within one month of reaching the age or of possession for responsible ownership. The Local Authority will provide the owner with a certificate of registration for the dog and microchip the dog as proof of registration.

CAPTURING DOGS: The Local Authority is in charge of capturing roaming dogs, providing a requisite number of dog vans with ramps for the capture and transportation of roaming dogs with a driver and two trained dog catchers.

A record of dogs captured shall be maintained, mentioning the name of the area, date and time of capture, and details about dogs captured. The dogs must be captured humanely. Each dog is to undergo a health check up by a veterinary doctor.

BITES AND ATTACKS: The Local Authority must pay the costs of curing any injuries or infection resulting from an unowned dog biting or attacking any person or animal along with a compensation at the rate of ₹1,000/ per day for each day the person is unable to engage in their usual occupation.

It must maintain records of the nature, impact and costs of incidents

caused by dogs, including dog bites, attacks, accidents, rabies and deaths with adequate traceability of the affected person, the concerned dog, and the location.

BOARD RESPONSIBILITIES: A board constituted under the law for prevention of cruelty to animals, should oversee the implementation of the provisions of the policy by the state and ensure that animal welfare organizations are spending taxpayers' money well.

FEEDING IN PUBLIC PLACES: No person shall feed any dog in any public places. A penalty of ₹500 would be levied for a first offence and ₹1,000 for a subsequent offence.

NEUTERING: The Local Authority and animal welfare organizations shall offer neutering through local veterinary doctors. Both male and female dogs shall be neutered.

EUTHANASIA: Only a veterinary officer or another competent person shall euthanise a dog, except in an emergency, to terminate a dog's suffering.

Any euthanasia shall be done with the minimum of physical and mental suffering. The method chosen to euthanise a dog shall either cause immediate loss of consciousness and death or begin with the induction of deep general anaesthesia.

MONITORING COMMITTEE: Every Urban and Rural Local Authority is to constitute a Monitoring Committee consisting of an elected representative or the sarpanch, a ward officer or village administrative officer, a veterinary officer, three citizens and an officer of the State Forest Department in case the area is within a 10 km radius of a wildlife sanctuary.

POUNDS AND KENNELS: The Local Authority can licence animal welfare organizations for setting up dog pounds, including kennels for rehoming/sheltering any of the captured dogs which are not to be euthanised on annual registration.

Pounds and kennels should have drainage, water and electricity. Size, design and occupancy capacity should be addressed. They should be suitably located outside residential and commercial areas. The dog pounds should include isolation and quarantine facilities.

(Image caption within column: DOG POPULATION MANAGEMENT AND RABIES CONTROL POLICY / HUMANE FOUNDATION FOR PEOPLE AND ANIMALS)

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from them. The guidelines and the provisions and spirit of the ABC Rules didn't match.

"The ABC Rules are the complete opposite of what the WHO has suggested and what the whole world is doing," says Uniyal.

She was convinced that it was not a good idea to be sterilizing animals and putting them back on the street. Far from being a solution, it was complicating the problem.

"I became a kind of an outcast within the dog-loving community because I was saying you can't be putting them back on the road," says Uniyal.

She could see realities at ground level. Working with Blue Cross, she would go with vans which put back dogs onto streets and there would be opposition from local people. They didn't want the dogs that had been taken

for sterilization to be put back, she remembers.

Not getting a response from the animal welfare organizations, she started getting in touch with human rights organizations. There was Stray Dog Free Bangalore. There was also Dr Rosario Menezes in Goa who had started People for the Elimination of Stray Troubles.

Such organizations are more in the zone of the kind of solutions that Ramkumar and Uniyal are seeking. But bringing about changes in policy isn't easy.

Of the innumerable MPs, MLAs and municipalities they sent their draft model policy to for comments, it was only a middle-level functionary in the Rajkot Municipal Corporation who responded, but only tentatively and nothing apparently came of it.

Getting lawyers to represent them in court

has also been a huge challenge. The stray dog problem has wide ramifications for the well-being of people and the quality of life in Indian cities. It is a complex issue. But it is difficult to find lawyers who will take up such a case and devotedly pick their way through its multiple layers and nuances.

Finally, sorting out the stray dog problem goes much beyond the courts. It has to do with better governance and social responsibility. There are multiple layers to the problem which are difficult to define.

Not everyone will say stray dogs are a menace and fierce and troublesome. And yet the people they attack get injured, traumatized and some of them, like the child at the beginning of our story, actually lose their lives. Urgent action is clearly needed. ∎

The federal political cycle

**DELHI
DARBAR**

SANJAYA BARU

ECONOMISTS are familiar with the concept of a business cycle and some even with the idea of a political business cycle. The term business cycle refers to the ups and downs of economic activity as output, investment, employment and other such economic indicators rise and fall over time. Economists have been able to identify short-term, medium-term and long-term cycles. A political business cycle is a concept used to explain politically motivated increase or decrease in government spending associated with a democracy's electoral cycle. Governments tend to increase public spending before elections and try to improve public finances through taxation and more prudent spending after elections.

Politics and public policy in India have also come to be defined by what one may term as a federal political cycle. In a large, continental democracy like India that is a 'Union of States', as the Constitution defines it, there is a constant struggle for power between political elements in power in the Union government and in the states. Given that there are democratically elected governments at both levels, the political factors shaping public policy at the Union level may often differ from, even be in conflict with, those that define public policy at the state level.

Apart from this purely administrative element, defined by the different constitutional roles of the Union and state governments, purely political factors may also come into play in defining what may be called the 'balance of power' between the Union and the states.

Students of Indian politics are all too familiar with such issues. Students of public finance are equally aware of what is usually referred to as 'Centre-state' financial relations. However, the Constitution has laid down certain principles that define both Centre-state financial powers

and relations as well as the administrative power and domain of state governments. The authors of the Constitution also foresaw likely shifts in the 'balance of power' between the political elements in power at the Centre and in the states when they defined the provisions for the imposition of President's Rule.

It was a decade and a half after Independence, in the twilight years of Prime Minister Jawaharlal Nehru's tenure, that political tensions between the Union and state governments began to manifest themselves. The concentration of power in New Delhi in the first decade after Independence was partly defined by the compulsions of national unity and integrity and partly shaped by the fact that

New forces are emerging asserting regional identity: KCR with Arvind Kejriwal

the same political party, the Indian National Congress, was in office at the Centre and in the states. However, as the Indian Union settled down to routine politics and Nehru's dominance as well as that of the Congress party began to decline, regional and state-level political forces began to assert themselves.

Thus, the 1960s witnessed shifts in the balance of power between the Union and the states as regional leaders began to assert themselves after the death of Nehru. Political leaders like Charan Singh, C.N. Annadurai, E.M.S. Namboodiripad, K. Brahmananda Reddy, Y.B. Chavan, H.N. Bahuguna and so on emerged as influential political leaders. Some of them were leaders of non-Congress parties. After Nehru's death the balance of power shifted in favour of the regions and away from the Centre.

After 1969, and especially after 1971, Prime Minister Indira Gandhi began to assert the power of the Union against the states. The Emergency years constituted the high point of this shift of power back to the Centre. The end of the Emergency resulted in a short period of centripetal political tendency that was again briefly reversed as the Congress regained power in New Delhi.

Beginning from 1989 and ending in 2014, India experienced a long phase of regional political assertion in which the Union had to constantly negotiate its relations with the states, with successive prime ministers dependent on powerful chief ministers for their own survival in office. Interestingly, all the three important prime ministers of this era, namely, P.V. Narasimha Rao, Atal Bihari Vajpayee and Manmohan Singh, were able to manage the constant shifts in the balance of power between the Union and the states quite well. For example, there were fewer cases of the imposition of President's Rule during their tenures than the tenures of Indira Gandhi and Rajiv Gandhi.

The election of 2014 marked the beginning of another phase in which the balance of power shifted away from the states back to the Centre. The improved electoral margin with which Prime Minister Narendra Modi returned to power in 2019 further consolidated the power of the Union government vis-a-vis the state governments.

However, every time there has been an excessive tilt to one side of the equation, political forces have come into being, seeking to restore some balance. Thus, in response to Prime Minister Modi's attempts at excessive

> **The electoral margin with which PM Modi returned to power in 2019 consolidated the power of the Union government vis-a-vis the states.**

Gyanvapi and Nupur Sharma

INSIDE TRACK

NILANJAN MUKHOPADHYAY

POLITICIANS thrive on staying in the news. No publicity is bad publicity for them, as the old saying goes. For all the condemnation and arraignment heaped on Narendra Modi over the Gujarat riots, he went from being chief minister to prime minister. When I once asked him during a decade-old conversation whether ceaseless accusations bothered him, he alluded to the advantage of being in the public gaze.

Politicians are not equally adept at this but they try with varying success. At a time when talking points are increasingly set by social media and acrimonious news television debates, it is but natural that aspiring political leaders, especially party spokespersons chosen for the ability to be combative, will try to outdo one another in hurling insults with the intention of being noticed.

For several days in June, Nupur Sharma outran all Bharatiya Janata Party (BJP) leaders, including Modi, in Google searches. There were more 'searches' for her than the Prophet, too, the target of her blasphemous attack during a TV show, proving that baseness pays.

Having passed out from the finest of educational institutions in India and abroad, she would not have been unaware of her statement's sensitivity quotient. Yet, she chose to say what she said. The party did not initiate action for almost 10 days, suggesting indiscretion is routinely condoned, if not encouraged, by the party's brass.

Even after her suspension from the party, public support for Sharma was noticeable —

suggesting it is a question of time before she is rehabilitated. The politics the BJP has pursued since 2014 has created a constituency which backs the likes of Sharma and its support cannot be risked. There are, after all, many others within the BJP who have made despicable remarks against Islam and Muslims and held on to positions because there was no international outcry.

At almost the same time Sharma was making headlines, the Sangh Parivar weathered another controversy. The Rashtriya Swayamsevak Sangh (RSS) chief, Mohan Bhagwat, said at the culmination ceremony of a training camp for *pracharaks* that there was no need to look for *shivlings* under every mosque. It was an off the cuff remark, but taken in isolation from the rest of his address, it was a clear sign of the RSS deciding to de-escalate the *mandir wapsi* or temple restoration efforts across India.

Temple restoration appeared to be the path the Sangh Parivar had chosen when court cases began being sequentially filed over several shrines and monuments, including the Taj Mahal and the Qutub Minar, Dhar's Bhojshala, Bhopal's Jama Masjid and even in Karnataka. But what Bhagwat said to the *pracharaks* seemed to indicate a rollback. There was a sense of dismay among Hindutva supporters. What right did the Sarsanghchalak have to promise no movement for removal of the Gyanvapi Masjid, these supporters wanted to know. How could the process of 'redeeming' Hindu pride be given up unilaterally? This was no different from the Hindutva hardcore being vocal in its support for Sharma and asking what was 'wrong' with her statement. Is it not the 'truth', they said.

Bhagwat's words taken in isolation indicate a desire for moderation. He has in the past too made statements in which he has seemingly reached out to Muslims and secularists.

But each time the fine print of what was said

was that Muslims were part of the Sanatan Dharm tradition and that they needed to acknowledge a "common ancestry" with Hindus. What remained implicit was that this heritage included mythology. Both expectations are difficult to meet for any religious community.

There is no ambiguity that the BJP has acquired its dominance by falsification of history and by depicting the medieval era as a millennium (the duration of this period varies from leader to leader) of slavery under Muslim invaders. Despite his 'no more looking for *shivlings'* edict to the rank and file, Bhagwat was clear that the Hindu claim on the Varanasi mosque 'had basis' and thus its settlement could only be in favour of the community.

His suggestion that this be done by dialogue and by following the law and the Constitution was hollow because attempted mediation on the Ayodhya issue demonstrated the improbability of agreement on what the Sangh Parivar termed was a "matter of faith". Solution to disputes in Varanasi, Mathura and other shrines (several thousand, actually, according to the 'list') lies within the framework of the law. On this matter, the Places of Worship Act, 1991 makes it unambiguously clear that all shrines (barring Ayodhya, that is now 'settled') shall remain in the state that they were in on August 15, 1947.

But despite Bhagwat's assurance, there is no reason to believe that the claim over other shrines, especially in Mathura, will be given up. The BJP, more than the RSS, has to run with the hare and hunt with the hounds although this cannot be done simultaneously in politics. Over the past eight years, as alienation of religious minorities demonstrates, the BJP has spent more time with the hounds than the other way. ∎

The writer is an NCR-based author and journalist. His latest book is The Demolition and the Verdict: Ayodhya and the Project to Reconfigure India. *His other books include* The RSS: Icons of the Indian Right and Narendra Modi: The Man, The Times. *He tweets at @NilanjanUdwin*

Federal political cycle

centralization of power, regional political parties have become more assertive. Political parties with a base in the non-Hindi states have been particularly active, as in Kerala, Maharashtra, Punjab, West Bengal, Tamil Nadu and Telangana, but in Hindi states too new forces are emerging, asserting regional identities as opposed to the national.

The election to the post of President of India has offered an opportunity for all 'regional' forces to try and unite and correct the

imbalance in the power equation between the Union and the states, nudging the federal political cycle in the direction of enhanced power for states vis-a-vis the Union. Irrespective of who wins the presidential race, the contest itself will bring forth issues relating to the balance of power between the Union and the states.

At least one issue that deserves closer scrutiny is the political role of governors in the states. The Bharatiya Janata Party is repeating Indira Gandhi's folly of using partisan governors to unsettle elected governments in states. An unseemly and partisan battle

between the governor and the chief minister was first witnessed in Kolkata. This has since been followed by the political theatrics of the governor of Telangana. In Tamil Nadu, a retired police officer occupies the Raj Bhavan, troubling the CM, while in many other states governors are openly partisan in their public appearances and speeches.

Taken too far, this centripetal turn in the federal political cycle will set in motion centrifugal forces that will seek to restore balance in the equation. ∎

Sanjaya Baru is a writer and Distinguished Fellow at the United Service Institution of India.

Creating urban harmony

LOOKING AHEAD

KIRAN KARNIK

THEFTS. Street crime. Dacoities. Drugs. Gang wars. No, this is not the ad blurb for a new Bollywood potboiler; rather, it is a possible scenario of urban India in the next few years. Last month, this column had discussed the certainty of a large influx of job-seekers, mainly from eastern and central India into major industrial-commercial centres in South and West India. It noted that such migration could create social tensions and would have political implications.

These migrants would fill the demand-supply gap caused by a booming economy and an inadequate population of workers in these states, all of which have witnessed decreasing population growth rates. Industry and business will welcome this influx, as it will help control wage increases. Many of the migrants would be willing to work on a contract or temporary basis, even though this implies minimal benefits and no job or social security.

An understandable desperation to earn a livelihood to sustain themselves, plus the need to send money back to the family, will make them susceptible to both: exploitation by employers, and temptations that provide quick money. Add to this the daily physical and mental stress of urban life — including job insecurity, low wages and rising costs, commuting, problems of housing, water, and power — combined with the absence of family support, and you have a combustible mix.

These issues are in an ambience of rising inequality, ostentatious display of wealth, materialism, and the advertisement-driven creation of wants and desires. While most resist the lure of illegally making a fast buck, a few succumb to the temptation of making easy money through crime. Often, this is further driven by the need for money to buy alcohol or drugs: habits that get created by the need to at least temporarily escape from the stresses of life for the poor.

In years to come, as rapid-growth centres attract ever more migrants, these problems will multiply, and could make these cities the hubs of social strife, crime and drugs. The rich will seek to insulate themselves from problems by

creating protected and self-sufficient islands, of which the gated communities of today are a prototype. This will create even greater schisms in society. Public infrastructure will degrade further, since the influential no longer use it (examples of this are the public health facilities and government/municipal schools in many parts of the country).

The poor, unable to afford the rising costs of housing, will live in shanty towns, temporary structures or over-crowded hovels and slums, often constructed on encroached land. Migrants, generally from faraway places, will tend to stay with or near those coming from the same area and sharing a common language, cuisine and culture. Inevitably, they will feel alienated from the local population. This will be amplified by the various divides: rich-poor, outsider-local, educated versus minimally schooled. These ghettoes of migrant workers

Photo: Civil Society/Umesh Anand

Migrants get minimal benefits and no job security

could become a lumpen proletariat, available for the picking by various rabble-rousers and political parties.

Is such a dystopian scenario the only possibility? What, if anything, can be done to change the direction or speed of this seemingly inevitable vector? Over the next three or four years it will be well-nigh impossible to do a great deal, though some steps may help to alleviate the extent of the problems. However, taking a longer-term perspective, in a decade it should be possible to not only slow the downhill momentum, but to even reverse it. A few critical policies and actions that are necessary are outlined below:

● Create livelihood opportunities on a massive scale in the poorer eastern/central states. Focus on non-farm jobs and entrepreneurial ventures, facilitated by the decentralization made possible by connectivity and digital technologies. Examples include all-India supply chains linking rural MSMEs to city-

based industries; dispersed BPO facilities; and village handicrafts finding all-India (even global) markets through ONDC or similar e-commerce platforms.

● Upgrade physical connectivity and infrastructure in these states, with the goal of promoting tourism (a big job creator) in a massive way, besides spurring growth.

● Make conscious and sustained efforts to correct the huge regional imbalances: a disparity that has, in fact, grown over the years. This would require large investments in the lagging states by the Centre, and the creation of special incentives to attract private investment. States must ensure a congenial climate by reducing regulatory friction and corruption, ensuring law and order, and improving their social and physical infrastructure.

● Reduce the worsening economic inequity through taxation and higher-quality, better-paid and more jobs at the base of the economic pyramid. High-quality school education, universal healthcare, and an expanded MGNREGS (including urban areas and more days) are necessary.

● Create facilities like neighbourhood playgrounds, community centres for theatre and dance, and a "library" of musical instruments in cities in the south and west. The purpose is to promote activities where achievement does not require education or money, and where people from diverse regions and classes can interact or play together as equals in a team. These will also serve as stress relievers for workers, even as it helps them to integrate into their new community. Low investment, team sports like volleyball and football must be encouraged.

● In these cities, provide low-rental housing, with water, power and sanitation, for migrants, near their work centres.

● Avoid dependence on strong-arm policing and ever-more-draconian laws to reduce crime. A "softer" and psycho-social approach, as suggested above, will have a greater impact and be more beneficial.

We began with a dystopian scenario, a bleak future. However, this does not have to be so. Even as the regional balance is slowly corrected and more employment created in situ, migrant workers can be better integrated to culturally enrich cities that become hubs of harmony and fraternity. This, though, calls for urgent action of the type outlined above. ∎

Kiran Karnik is a public policy analyst and author. His most recent book is Decisive Decade: India 2030, Gazelle or Hippo.

Rivers need groundwater

LIVING RIVERS

VENKATESH DUTTA

THE Ganga basin, the world's most densely irrigated area, is a global hotspot of groundwater depletion. The five states through which the Ganga flows account for almost 40 percent of India's total cultivated land. The basin has 360,000 square km of irrigated land or around 57 percent of India's total net irrigated area. Groundwater is used to provide a large portion of this irrigation requirement. In reality, the transboundary Ganga basin accounts for one-fourth of total worldwide groundwater abstraction, with South Asia alone accounting for 48 percent of global groundwater consumption.

It is crucial to acknowledge that groundwater plays a key role in ensuring that all rivers retain their base flow even during the summer months. Groundwater, though hidden in the sub-surface, is essential for the survival of aquatic and terrestrial habitats. Local and regional groundwater resources are depleted when water withdrawal exceeds natural water recharge. Almost 90 percent of freshwater is utilized for irrigation globally, and groundwater pumping surpasses acceptable levels in India.

The dramatic decrease in river flows in recent years is a direct consequence of this. Even the flow of water in the Ganga is heavily dependent on the groundwater table, which is linked to long-lasting groundwater storage in the connected Gangetic aquifers. The impact of declining groundwater tables on river flows may be seen clearly in many tributaries of the Ganga which are witnessing significant reduction in their annual flows such as the Gomti, Ken, Betwa, Chambal, Narmada, and so on. Take, for example, the Gomti river basin — the percentage of land with post-monsoon water table over five metres was 91.45 percent in 1984, but it declined to 52.26 percent in 2006. Only 42 percent of the basin's water table is higher than five metres today.

As a result, wetlands are becoming drier and rivers are becoming intermittent in flow. In the past 50 years, the flow of some tributaries of

Heavy groundwater extraction is drying up the Ganga in summer

the Ganga has decreased by 30 to 60 percent. The decline in groundwater level and disconnect in base flow are two major reasons. Groundwater is a primary source of environmental flow in our rivers. As groundwater level drops, perennial rivers are turning seasonal. The Ganga basin's continuous and long-term groundwater extraction has resulted in a sharp decline in the lean season flow. The river has low water levels in numerous lower segments such as at Allahabad and Varanasi and has a propensity to dry out through the summer.

Recent studies show that groundwater storage in the Ganga basin is rapidly declining and groundwater extraction at the current rate is totally unsustainable. Excessive canal diversions, river engineering with hard infrastructure and surface water abstraction are all contributing to the river's diminishing flows. While we talk about yearly groundwater table declines of a few centimetres, in essence, excessive groundwater extraction might result in a constant large-scale mass loss over the whole basin in several cubic km. This can dry ecosystems and rivers that rely on groundwater. Recharging aquifers and efficient surface water management are critical for long-term water supply and ecosystem protection.

Let's imagine the contribution of irrigation in our GDP. The Ganga basin accounts for almost 40 percent of India's GDP, yet the significance of groundwater is either ignored or undervalued. Hydrating the economy by dehydrating rivers and aquifers will not work in the long run. Healthy rivers are signs of a healthy economy. We rely on our natural resources for our GDP. We may not be able to restore our degraded rivers even if we have enough money and physical resources. Over-

extracting water from our rivers could damage the revitalizing forces that sustain these riverine ecosystems. Rapid economic development has resulted in a severe reduction in river health in India. It has influenced the myriad societal advantages that rivers offer free of cost, known as 'ecosystem services'.

Over the next few decades, population expansion, urbanization, pollution and climate change, among other things, are predicted to strain these services. And this will have a cascading impact on our economy with diminished quality of life for people. Even though we rely on the bounty of rivers for our survival, at the same time we poison them, impede their flow, over-allocate their water into canals and dead channels, and degrade them in every manner possible. Due recognition of a river's rights in our culture and society is yet to take place. We will eventually respect the fluvial memory and riverine landscapes and live in tandem with the flow of the river for our own survival.

River restoration is becoming a typical strategy to counter deteriorating river health, and its significance in water resource management is only likely to expand in days to come. However, we should remember that only nature-based solutions will last. The resilience of concrete structures against the free spirit of rivers will be tested.

Cities and municipalities must safeguard their water sources and watersheds. All we have to do now is make sure we don't infringe on the blue landscapes. The Ganga basin's geo-hydrological boundaries are formed by aquifers, and not by administrative boundaries. Subsidies are fuelling groundwater exploitation. Night-time irrigation is triggered by off-peak power dumping. Farmers resort to flood irrigation with free power and free groundwater. The pricing signals do not accurately represent the societal and ecological value of groundwater. Due to the huge energy footprint of agricultural production, including irrigation, we need to come down to 'crop per watt' instead of 'crop per drop'. In the face of climate change, we must also concentrate on adaptive governance where we can recharge in the event of flash floods and utilize the water that has been stored in the event of water scarcity. ∎

Venkatesh Dutta is a Gomti River Waterkeeper and a professor of environmental sciences at Ambedkar University, Lucknow

LIVING

A reporter abroad

Unpacking a country for readers

CIVIL SOCIETY REVIEWS

INDIA's globalization efforts will always be incomplete without a deeper understanding of other societies and connections that don't just stop at geopolitics and big business.

But how can Indians go beyond stereotypes about people and cultures in the rest of the world? How can they escape the lure of clickbait and prime time?

The media has an important role to play in connecting people internationally. A good foreign correspondent is indispensable. Having a pair of Indian eyes on the street is necessary for getting those everyday stories about how people live and the social and cultural choices they make that might find resonance in India.

Unfortunately, Indian media houses, ever watchful of their profits, have reduced or cut out altogether the investments they used to make in having editorial talent abroad.

There was a time when accomplished journalists would be posted in important capitals to provide a perspective relevant to India. But no more. What comes now is from Western agencies and papers that straddle the world and see it from their own orientation and perch as global providers of information.

However, when a perceptive Indian foreign correspondent is in position in a country the difference is there for all to see. Pallavi Aiyar has reported for Indian papers on countries she has lived in.

Apart from the political and economic stories of the day, she has also put together lively, anecdotal and yet insightful coverage of the everyday lives of people.

We in this magazine discovered her through her books, which draw on her reporting. We first read *Smoke and Mirrors: An Experience of China* and then, more recently, *Orienting: An Indian in Japan.*

Both books had by then been fairly widely circulated, but for us an interview with Aiyar was nevertheless in order.

Aiyar sees herself as an Indian reporter bringing the world to Indian audiences though she has spent long years abroad and is married to a European diplomat.

Interestingly, she remains an Indian passport holder, which means her husband and children have it easy at airports but she gets stuck in long queues.

"Keeping my Indian passport is like having a bad boyfriend," she says. "It doesn't do much for me but I can't give it up!"

"I have always seen my primary role as an Indian foreign correspondent, not just to report geopolitical meetings, exchanges of trade teams or ministers or whatever, but to try to unpack the country that I am living in as best as I can for my audience back home and to really get the pulse of any country," she says.

"There is a lot to be learnt from the simplest things like looking, walking, just paying attention to street signs when you walk or

Pallavi Aiyar on a cherry blossom high

looking at the titles of books that people are reading on the subway. I remember doing a piece on manhole cover art to point to sanitation," Aiyar explains.

People are invariably rooted in the past and simultaneously in transition. Getting to know societies well means both knowing their history and culture and observing people in their daily lives and what is important to them as they make the choices they make of how they like to live.

"I think the value you bring is in those mundane quotidian everyday observations that actually have a lot of revelatory power in them," Aiyar says.

"Parks in particular are great in any country. If you head to a park and just spend an afternoon there it's going to tell you a lot more about that country than attending a gazillion ministerial visit type of meetings. And I think that's what ultimately people are interested in and what value you can bring as somebody on the ground."

But it is not the kind of coverage that is at all visible in Indian papers and magazines and certainly not TV channels. Aiyar's most interesting stories, for instance, have to be discovered in her books.

So, is India missing out on a great opportunity to connect with other societies and learn from their experiences? Is it also a missed opportunity for the Indian media as it stays focussed on politicians, big business, and accidents and murders?

"Of course it is a missed opportunity, but it is a bit of a Catch-22 situation. We generate enough news within our country to kind of be a globe, a world in itself. And the rest of the world has to kind of compete with these huge big domestic stories. And so, you know, editors basically use it as an excuse to say that Indians are just not that interested," explains Aiyar.

"And one of the reasons Indians are not that interested is that you don't have any Indian foreign

correspondents in other parts of the world who are making those places relevant and interesting and making those connections for Indians.

"When we do consume foreign news, we tend to consume it from a Western lens, which is removed. We read the *New York Times*, we read the big wires, which are writing for a very sort of global disembodied audience and not making the sort of direct comparisons that would be a hook for Indians," she says.

Aiyar's reportage flows easily. It is not touristy in tone nor is it heavy and pedantic as it could have become. Historical and cultural contexts are provided but hers is no cut-and-paste act. It is a relief that she is not out to impress you with how much she knows.

At the same time she tells you a lot. She is a good reporter who takes you along on a journey with description, information and analysis which hang together nicely.

Aiyar was in China during SARS and in Japan as COVID-19 spread. How the health systems of the two countries responded to these challenges is interesting. Also relevant in the Indian context is China's experience in dealing with air pollution.

But Aiyar is not out to provide a handbook of governance models. Read her for the experiences she offers and the scenes she walks you through.

Join her at cherry blossom time when Japan goes crazy over the Sakura — from the official time that the flower will open to merchandise branded to mark the season. Staid public parks fill up with people and wild boozing sessions take place under every available cherry tree.

You can be present with her at Yoyogi, Tokyo's version of New York's Central Park, and see customary Japanese social restraint abandoned in the spirit of the season.

But the wild exuberance is not without the Japanese fondness for rules. The drinkers bring bags to cart away their rubbish — every bottle, every napkin. A notice distributed by a local municipal authority says: Mind Your Manners.

The Japanese obsession with rules and cleanliness is interesting and should be of particular relevance in India. Colourfully designed manhole covers take sanitation to the level of art. Segregation of garbage is such an intricate exercise that a book of rules is required. Keeping toilets clean is regarded as the equivalent of worship.

Bits and pieces of Aiyar's reportage remain with one and support the larger stories that she puts together. For instance, the lack of living space in Japan. People either stay on late at work or go out drinking in Japan because their homes are too cramped. A man who

doesn't want to disturb the children doing their schoolwork literally sneaks in at night and says he feels like a stranger in his own home.

In China one of Aiyar's students (she was teaching English there) slaps a beggar woman for seeking money from a foreigner!

Then again, children are so safe in Japan that they can use public transport to school. A child who Aiyar thinks is alone and lost is merely heading home.

What are the limits to learning from other societies? What is so deeply ingrained that it is not transferable? The answers lie in doing what one can. Toilets can be made prettier and cleaner for women. It is possible to ensure streets are safer for children. Better civic systems and awareness campaigns can get garbage out of sight.

"I totally agree. Many learnings are quite simple and are transferable. Some are so culturally rooted that it might be difficult to sort of transform, say, New Delhi into Tokyo tomorrow. But there are other best practices, which are sometimes quite ingenious in their simplicity and can actually be imported to change things fundamentally. Improving women's toilets, for example. I remember in Tokyo going to places where all they did was paint the toilets so they just looked very pretty, they looked bright, they looked attractive," says Aiyar.

How would Aiyar describe the style in which her books are written? Are they diaries, memoirs or plain reportage in first person?

"A lot of the material or research for the books came from working as a reporter in those countries for a substantial number of years. In the case of China it was seven years, in the case of Japan, four years. So when you're a reporter in a country, you know, it automatically opens up parts of the country," she says.

As a foreign correspondent "your area of expertise is not really sectoral as much as it is geographical," she points out. This means writing on a variety of areas.

"There will be political stories, there will be aesthetic stories, there will be social stories, there will be human interest stories, and of course, there'll be the geopolitical angle as well," she says.

"And as is the case with any reporter you fill up your notebooks with lots of information that ultimately doesn't make it into whatever report you end up writing. Often the most interesting stories are just sort of lying around and lurking in your notebooks," she says.

The notebooks, she agrees, serve in some ways as a diary. But the books really are built on what she says are the three pillars of autobiography, analysis, and anecdote. ∎

Nandhana Palace's gen next is in the cloud

SUSHEELA NAIR

WE were on a culinary excursion to savour the flavours of Andhra cuisine in the Garden City. It was past 2 pm when we trooped into Nandhana Palace, an iconic restaurant started in 1989 by Dr Ravichander who was one of the pioneers in introducing Andhra cuisine to Bengaluru. With 15 restaurants and seven cloud kitchens, the Nandhana Group of Hotels has the largest chain of Andhra restaurants in Bengaluru. It is a stand-alone brand which has bagged several awards and due recognition for churning out the authentic flavours of Andhra cuisine.

Recollecting the genesis of the Nandhana Group of Hotels, Dr Ravichander, founder of the restaurant chain, says, "It all started when I watched the Tamil movie, *Manathil Uruthi Vendum.* I drew inspiration from the role of the female lead of the movie who singlehandedly took care of the entire family, similar to my life. Motivated by the heroine's sacrifice and my passion for food, I took my first steps in the restaurant business." Cuisine from the different regions of Andhra Pradesh has been included. "We started creating and curating new recipes from different regions to give it more authentic flavours," explains Dr Ravichander.

We sampled some dishes from the wide range in their menu. We started with the rich drumstick soup made with moringa (drumstick) leaves and the versatile drumstick which lends it a pulpy texture. All the pulp is extracted to form a thick soup. For non-vegetarians, there is the mutton bone soup, a peppery concoction that can soothe an irritated throat or clear a blocked nose.

Carrot 65 is a big hit as a starter, offering vegetarians a bit more than the usual paneer starters. It was crunchy, classy and spicy. What lends the spicy flavour is that it is coated in 65 masala, tossed in red chilli, curry leaves, garlic and then deep-fried.

Other favoured starters are Gobi Pudina Dry and Bendakaya French fries which are best served hot and crisp. It can be eaten as a part of lunch or dinner and also as a snack. For non-vegetarians, there are plenty of options in this restaurant. Our favourites were Sholay Kebab and Bamboo Chicken. The kebabs, with a generous coating of masala on the juicy chicken pieces, went perfectly with the mint chutney.

Nandhana's Bamboo Chicken, inspired by a recipe of the tribals of Maredumulli forest, seems to be a hot favourite. We learnt that the chefs were sent to the Araku Valley forest near Visakhapatnam to learn the nuances of making the dish the tribal way. The chicken, cooked

Photo: Nandhana Palace

Dr Ravichander was inspired by a movie and his passion for food to venture into the restaurant business

Photo: Nandhana Palace

Ramya and Shweta Ravi have started cloud kitchens

Photos: Civil Society/Susheela Nair

Andhra Bhojanam

Bamboo Chicken is a tribal recipe from Araku Valley

Carrot 65 is a crunchy starter

The next generation specializes in biryanis

with spices and minimal oil, acquires a rather mild flavour of the bamboo it is cooked in.

For vegetarians, there is the Andhra Bhojanam, served on a banana leaf. You can gorge on unlimited steaming rice, dollops of ghee, tangy *palak dal*, trademark gunpowder, *gungura* and *avakai.*

RICE FLAVOURS

The Nellore Mutton Biryani, which traces its culinary roots to Andhra Pradesh, is fiery, spicy and appeals to old-timers whereas millennials prefer Hyderabadi Biryani which is mild. Nattu Koli Biryani, cooked using *seeraga samba* rice and the fiery country chicken, owes allegiance to the founder's mother's recipe. It is punctuated with a variety of flavours, including the sweetness of pineapple.

We tried the Supreme Chicken Biryani, targeted at millennials, and the Paneer Biryani. The best thing about the former is that it comes with boneless chicken pieces. This long-

of spices, chicken and fresh greens sans the onion and tomato flavours. The mint-tempered masala and the stock are what lend a unique flavour to the dish.

They are not only continuing serving their grandmother's special Donne-style biryani but have also introduced variants of other biryanis, like boneless biryani, from the *naati* (native) cuisine.

Co-founded by Ramya and Shweta Ravi, RNR Donne Biryani Cloud Kitchens was launched in November 2020. It was established as one of the first brands to catapult Donne Biryani into the mainstream segment and organized sector. Apart from the core biryanis, bestsellers also include the Nati Style Chilli Chicken starter, Drumstick Chilli, mutton bone soup, mutton liver masala, mutton nalli, Nati Koli Drumstick Fry, Nati Koli Roast, Nati Koli Saaru and Elaneeru Payasam (tender coconut *kheer*).

grained rice biryani with its layers of masala is a tad too spicy. One can pair the biryani with the Chicken Kshatriya which was curated in the kitchens at Nandhana Palace. It is indeed an ode to the traditions of the family that runs this establishment.

Believing that innovation is the only sustaining factor for any business to grow, the second generation of the family has carried forward its glorious regional culinary heritage. In keeping with the evolving preferences of customers, the recipe of Donne Biryani has undergone a change currently. What makes Donne Biryani (which is ladled into leafy bowls made out of dry banana leaves) distinct from other biryanis is the mind-boggling array

The restaurant has metamorphosed from a small kitchen serving Donne Biryani to a cloud kitchen with a nominal investment of ₹5 lakh. "Cloud kitchen is the best route when you are venturing into a new segment. Keeping in mind the low investment model and one of the best channels to test the credibility of the idea, I opted for cloud kitchens. We took the risk, challenge and bold step to launch our brand during the pandemic. Our unique selling proposition is in the packaging. We deliver biryani in a royal format in a blue tin-box. At present, we have 14 cloud kitchens across Bengaluru. RNR has crossed ₹8 crore and is now close to touching ₹10 crore," says Ramya Ravi. ∎

> Small producers and artisans need help to reach out to sell their wonderful products. They can't advertise and they don't know to access retail networks. *Civil Society* happily provides information about what they have on offer, their skills and how you can get to them.

> So you want to do your bit but don't know where to begin? Allow us to help you with a list especially curated for *Civil Society*'s readers. These are groups we know to be doing good work. And they are across India. You can volunteer or donate or just spread the word about them.

Baking made easy

Bake a plateful of heavenly cookies with a range of flavourful dough from DoughpShope, a food tech start-up founded by three college students, Mauli Rajvanshi, Sarthak Verma and Nitigya Bhardwaj, in 2020. DoughpShope's readymade cookie dough is eggless. You can buy chocolate chip, vanilla sprinkles, red velvet and dark chocolate dough. The dough is handmade and uses heat treated flour. It is packaged in glass jars of 300 grammes, priced at ₹260 each. If you are a novice you can download cookie recipes from their website. The dough lasts 25 days at room temperature and up to two months in the fridge from the date of manufacture.

Contact: Mauli Rajvanshi
https://www.doughpshope.com/
doughpshope@gmail.com

Painted beauties

Add a touch of style to your wardrobe and home. Advaita Handicrafts makes handpainted articles, stoles, sarees, lampshades and *papier mache* art. The handpainted trays, plates and wall hangings are designed and sourced from women artisans in Mumbai. A Self-Help Group (SHG) that trains artisans in *pattachitra* and tribal art makes the lampshades and *papier mache* products.

Advaita also offers silk tussar stoles spun by weavers. Their catalogue includes ethnic silver jewellery with unique designs which are priced between ₹300 and ₹1,500. They also sell attractive embroidered and handpainted leather bags.

Contact: Leena Barick Kulkarni- Phone: +91-9920515148

A feast of bags

Kritenya sells grass bags, handwoven bags and upcycled accessories. They source grass bags directly from artisans in Assam and Manipur. Manjuri Hazarika, founder of Kritenya, designs the bags and runs the micro-enterprise with her husband, Anil Singh. Their handwoven bags are made using traditional weaving methods of Assam. Only natural fabrics are used. Most of Kritenya's weavers are women who support their families with the income they earn from weaving. Prices are reasonable. Upcycled mobile sling bags are priced at ₹250 and tote bags, shoulder bags and laptop bags range from ₹900 to ₹1,500.

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Arty puzzles

FroggMag sells folk, tribal and miniature art jigsaw puzzles. Run by Shalini Ghosh, an alumnus of the National Institute of Design (NID), FroggMag promotes Indian art through engaging games. The toddler puzzles cost between ₹500 and ₹600 and come in a set of six. The puzzles in two or four pieces are easy for a child to put together.

FroggMag also has 63-piece puzzles, priced at ₹600, that include Santhal art, Kalighat Pat and Madhubani, among others. The games are designed by women folk artists who learnt the art forms from their families and tribes. There are other memory-based games like mix and match puzzles available as well. In the catalogue are also pretty and colourful scarves and earrings priced between ₹500 and ₹2,000.

Contact: Shalini Ghosh, +91 9811408313, froggmag@gmail.com
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TEACH CHILDREN, SKILL WOMEN

Based in Noida, Niveda works for women's empowerment and child welfare. The non-profit provides education to children from economically weaker backgrounds through a mobile van service called Niveda Vidya Mandir & Mobile School Initiative. With the help of this mobile van Niveda has reached out to over 400 students through activity-based learning methods.

Niveda also runs a skilling centre for women which has courses in stitching and jewellery design. It runs IT centres with courses for computer training and sessions on technology.

Niveda's health awareness campaigns include nutritional support programmes and immunization camps for low-income communities with the help of health professionals and doctors.
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RESCUE CHILDREN IN SWEAT SHOPS

Set up in 2002, Sahyog Care for You rescues child workers from sweatshops and combats gender inequality by partnering directly and indirectly with schools and parents.

They work in collaboration with the government and its agencies to ensure access to quality education and resources.

In partnership with the Delhi government, BSES, and Delhi Shelter Improvement Board, Sahyog runs Water ATMs in Shakurpur Basti, Meera Bagh and Peeragarhi in New Delhi.

As part of the effort to free children from employers, egal camps are set up.

Humari Smart Shala is a programme through which Sahyog partners schools to offer access to digital literacy and labs for children and to improve the infrastructure of the schools.
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RAISE INCOMES IN THE NORTHEAST

Bringing together women to form self-help groups (SHGs) is a core activity of Seven Sisters Development Assistance (SeSTA). The SHGs build their capabilities and strengthen their livelihood systems to ensure poverty alleviation. The organization also helps in the setting up of farmer-producer organizations (FPOs), village organizations and producer groups. Currently, the non-profit works with over 60,000 families in the three northeastern states of Assam, Tripura and Meghalaya.

SeSTA supports 12 FPOs with over 15,000 members led by women.

SeSTA works on building climate resilient agriculture and related activities such as rearing animals, mushroom cultivation and fisheries. It links village communities to panchayati raj institutions and rural livelihood missions so that people from marginal communities benefit and are able to raise their income as well as participate in the global economy.
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SHELTER THE HOMELESS

Theruvoram, an NGO in Kochi, was founded in 2007 by Murukan S. Theruvoram, a social worker, to rehabilitate people living on the streets of this picturesque town. In the midst of the COVID-19 pandemic it helped rehabilitate 2,297 homeless people.

The NGO also runs a Theruvoram Women Empowerment wing. It provided cooked food to 500 people living on the streets daily during the pandemic. Volunteers and team members prepared the food. They also helped organize funerals for people during the severe second wave of the pandemic.

The Theruvoram Women Empowerment wing includes a Together We Earn project which organizes skill development and vocational programmes for women along with a social entrepreneur development programme. They also have a training programme for social work.
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PLANT POWER

Flowers and plants almost always capture our attention. We wonder what their names are, where they originate and what they could be useful for. There are rare plants we may never see. Ganesh Babu, a botanist, is our guide.

Rhododendron

The state tree of Uttarakhand and the state flower of Nagaland, *Rhododendron arboreum Sm.* is a small tree up to five m tall, known for its lovely array of bright red flowers, locally known as Burans. Rhododendrons grow in the montane ecosystems of the Himalayas and the Northeastern states. Rhododendron juice, extracted from its flower petals, is becoming popular amongst consumers.

Rhododendron's subspecies, '*nilagiricum*', is endemic to the Western Ghats. In Malayalam, this subspecies is called Malaipoovarasu or 'king of flowers'. The tree trunk's bark flakes off in scales. Its leaves and flowers are usually crowded at the end of its branchlets. With large and abundant blooms, rhododendron is an excellent flowering plant for pollination, for meadows and for butterfly gardens. Since it spreads, it is useful as a hedge, in groupings, and as a border shrub. It works well as a hedge, an accent, and around hardscape elements. Its showy display of vivid red flowers transforms gardens.

Duabanga

Duabanga is a fast growing tree species native to the eastern regions of India. It has a straight trunk, up to 30 m tall, with numerous spreading branches. Arising from the base, its branches are spirally arranged and four-angled. It has large leaves, up to 25 cm long and 10 cm broad, pinkish-red when young. Its flowers are densely arranged at every tip of the branches, mildly fragrant, white and up to six cm across. The outer whorl of the flower is thick and woody when dry and used in dry-flower arrangements.

Its horizontally spread large branches provide abundant shade and lovely blooms. Duabanga is a great specimen tree in landscaped gardens. It can also be used as tall woodland borders. Its flowers produce lots of nectar. One can watch mesmerized the dip of ants into its nectar which is very tasty. Its leaves are made into poultices and applied for stomach-ache.

Himalayan Daisy

Himalayan Daisy Fleabane is a perennial herb scientifically known as *Erigeron bellidioides* (Buch-Ham. ex D. Don) Benth. ex C.B. Clarke. It is a low, ground-cover plant, up to three cm tall, which spreads and forms a fabulous colourful mat. Its stems are much-branched, wiry, and suitable for hanging pots, or in vertical gardens and wall crevices. The flower-heads imitate sunflowers with yellow central disc florets and white ray florets along the periphery. The outer petals turn pink, making the flower clumps look three-dimensional.

The Himalayan Daisy is an excellent pollinator plant, attracting many species of butterflies and stingless bees. This species can convert barren basins around trees into flowering rings. It's also a great choice for rock gardens, slopes, and lawn-based gardens. Though the Himalayan Daisy

is native to Himachal Pradesh, Jammu and Kashmir, Meghalaya, Sikkim and Uttarakhand, it thrives in tropical parts of India too. Its crushed leaf juice is applied on fresh wounds as an immediate cure.

Malabar Melastome

The Malabar Melastome is a lovely plant species with evergreen foliage and delightful pink flowers, native to India. It grows commonly along marginal forests, roadsides, streams and grasslands of evergreen to shola forests throughout India. Being attractively red, its stems too bring beauty into gardens. The plant's leaves are a shiny green, similar to cinnamon leaves with three prominent nerves. It is a spectacular undershrub worth introducing to add colour and beauty to garden beds or borders. It looks marvellous when planted in groups or alone as a focal point. An ideal ornamental shrub for row planting, container gardening and raised planters, the Malabar Melastome's flowers attract many species of butterflies and bees. Traditionally, its roots and leaves are used for the treatment of dysentery and diarrhoea.

Polygonum Glabrum

Polygonum glabrum willd. is an amphibious plant with erect habit which grows upto 1.5 m tall. This species ornaments marshy areas with its splendid flowering spikes. Since it can live on water and land, it can be planted in wetland habitats as well as for dryland gardening. It is a sprawling shrub that spreads by suckering, and it requires pruning to keep it in control. Its long, erect, slender spikes are very attractive to butterflies and other pollinators. It can be used in groups or mass plantings, shrub borders, foundation plantings, or as a specimen shrub. This species is also good for aquascapes, storm-water projects and to increase the wetland biodiversity. In the Siddha system of medicine it is used to treat peptic ulcers.

Rangoon Creeper

Combretum indicum (L.) DeFijipps or Rangoon Creeper is an evergreen climbing shrub, native to Asia. It boasts of numerous bunches that have attractive, pendulous, trumpet-shaped, sweet-scented flowers. Hence, it is also called Madhu Malati. Its fresh flowers are deep red in colour which turn to pink and white after pollination, leaving this climber with tri-coloured flowers. It has green, glossy foliage with showy flowers in four colours.

The Rangoon Creeper attracts birds, butterflies and bees. This species can be allowed to sprawl over vertical structures or be a creeping ground cover on green lawns. It is a quick-growing climber and a gorgeous addition to cover up any ugly vertical spaces even up to 60 feet high. Adding this species to twine on intermittent archways will contribute to the natural beauty of any landscape. A decoction of its roots is used to expel intestinal worms. Its flowers are used to alleviate headache in our traditional systems of medicine. ∎

TATA STEEL FOUNDATION

TATA

Reimagining
remote **learning**

through Education Signature Programme at Tata Steel Foundation

One of the most profound impacts of the Covid-19 pandemic was the gap in learning and dropout of children from rural government schools across India. The Foundation worked relentlessly to ensure continuity of children's learning in interior villages, leveraging the meagre digital pathway and presence of teachers to create a programme that took specially designed learning content to children in their homes throughout the lockdown period, enabling a major boost in their learning outcomes.

1, 50, 000 children on the verge of dropping out of schools in the remotest areas of Odisha and Jharkhand continued their learning through the Lockdown Learning Programme.

Reimagine