NATIONAL CONFERENCE ON SOCIAL INNOVATION

17th & 18th NOVEMBER 2021

Urban Innovation

Rural Innovation

Tribal Innovation

NCSI REPORT 2021
NATIONAL CONFERENCE ON SOCIAL INNOVATION

17th & 18th NOVEMBER 2021
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The National Conference on Social Innovation (NCSI) began as a platform to bring thought leaders from the social sector together. The programme has since evolved to become a prominent national platform to curate and bring to the fore, social entrepreneurs from across the country. These entrepreneurs are building products and services that help improve the quality of life for the poorest and marginalised segments of society.

NCSI has provided a platform to more than 145 social innovators over the past 8 years. The programme is also attended by CSR representatives of some of the most progressive organisations in the country. We have also been welcoming friends from incubators, accelerators and the world of impact investment for the last three years.

The NCSI Social Innovation Lab was introduced in 2017 and we are happy to share with you the progress made by this lab. The ‘Social Enterprise Mentorship Programme’ is run by Pune International Centre members under this lab for the last 5 years and currently, 27 social enterprises are being mentored in their scaling-up journey.

PIC has been organising the National Social Innovation Conference for the last 9 years with the objective of promoting the cause of social innovation and providing a fertile ground for collaboration by social innovators and CSRs of leading corporate houses. Innovations in health, education, livelihood, technology and agriculture are covered in the conference. PIC actively promotes the spirit of social innovation by organising NCSI as a flagship event every year.

One of the first initiatives of this conference was the Anjani Mashelkar Inclusive Innovation Award (AMIIA) which has been receiving enthusiastic nation-wide response.
We would like to thank our Chief Guest Mr. R. Mukundan, CEO and Managing Director, Tata Chemicals, for a very thought-provoking keynote address. We also wish to thank Smt. Chetna Gala Sinha for her valedictory keynote address. The presentations by 18 innovators from Tribal, Rural and Urban Categories covered diverse fields from agriculture to healthcare, education and community empowerment.

We would like to make a special mention of our team of mentors under PIC’s Social Enterprise Mentorship Program, namely, Mr. Sanjay Kanvinde, Mr. Pramod Athalye, Mr. Gireendra Kasmalkar, Mr. Anil Kulkarni, Mr. Ram Iyer and Mr. Amit Bhargava. They have been very active under the mentorship program which started in 2017 and have mentored 45 social innovators who benefited from this program. We welcome our new mentors Mr. Sandeep Chawda, Mr. Madhukar Bhatia, Mr. Hemant Joshi and Mr. Shekhar Jadhav to the PIC Mentoring program and look forward to working with them.

With warm regards,

R.A. Mashelkar, F.R.S.                     Vijay Kelkar, F.N.A.E.,

President, PIC                           Vice President, PIC
Message from Director

The 9th National Conference on Social Innovation (NCSI) held on 17th and 18th November, 2021 with our partner institutions, National Innovation Foundation (NIF) and Tata Institute of Social Sciences (TISS), was once again a grand, inspiring event.

Like every year, we began with the much-awaited Anjani Mashelkar Inclusive Innovation Award presentation ceremony. This year, the prestigious award went to Dr. Subhash Narayanan and his team for developing the Optical Imaging Multimodal Device for early detection of pre-cancer in the mouth.

Every year, one outstanding social innovation from Tribal, Rural and Urban categories wins a prize. This year, we received 140 applications from 24 states. These applications were from such diverse places as Leh, Srinagar, Hyderabad, Jaipur andChruchandrapur.

All the applications underwent two rounds of screenings after which 30 applications were shortlisted. The shortlisted applications were then examined by an Evaluation Committee comprising Mr. Pradeep Bhargava, former President, Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA), Mr. Vijay Mahajan, Director, Rajiv Gandhi Foundation, Mr. Pradeep Lokhande, entrepreneur and Founder, Rural Relations, Dr. Vipin Kumar, Director, National Innovation Foundation and Ms. Kishori Gadre, ex-Maharashtra Government Researcher and Social Scientist.

This committee gave us the final list of 18 innovators who eventually presented their innovations to an audience comprising top CSR representatives, impact investors, incubators and accelerators. The innovators also made presentations before three panels headed by Prof. Neeraj Hatekar (Tribal panel), Ms. Reema Sathey (Rural panel) and Ms. Geetanjali Choori Patil (Urban panel).
We wish to thank these panels and the CSR representatives, impact investors, accelerators and incubators who spent two days with us and gave valuable feedback. Special thanks are also due to our partner institutes on the NCSI - National Innovation Foundation (NIF) and Tata Institute of Social Sciences (TISS), for their unstinted support to this programme.

The media has been extremely supportive of the NCSI and its various initiatives and we wish to thank our friends in the media for their generous coverage.

The Social Innovation vertical at the PIC now has a dedicated team led by Mr. Mandar Joshi to drive the efforts with greater focus and vigour. Their efforts have been much appreciated and this team has been working hard to transform the NCSI into a social enterprise movement.

The following pages present our report on the progress made this year even as we look forward to expanding our work in the coming years, with your continuing support.

Abhay Vaidya  
Director  
Pune International Centre
AGENDA

The conference was held for 2 days with the following agenda:

Day 1:
- Welcome, Introduction - Mr. Hitendra Singh, Fellow, PIC
- Opening Remarks – Dr. R A Mashelkar – President, PIC
- Keynote Address - Chief Guest Mr. Mukundan Ramakrishnan, CEO & Managing Director, Tata Chemicals Limited
- Citation of NCSI Finalists
- Interaction of Chief Guest Mr. Mukundan Ramakrishnan and Dr. R A Mashelkar with the finalists
- Tribal Innovation Session
- Concluding Remarks - Dr. Vijay Kelkar (Vice President, PIC)

Day 2:
- Rural Innovation Session
- Urban Innovation Session
- Valedictory Keynote Address - Smt. Chetna Gala Sinha (Founder & Chair - Mann Deshi Bank & Foundation) chaired by Mr. Pramod Athalye, Founder, Bourton Consulting India
- NCSI Prize Distribution
- Vote of Thanks – Mr. Gireendra Kasmalkar
Sustainability and digital tools are driving inclusive innovations and driven by these two forces today’s time are ideal for entrepreneurs to drive social impact solutions at a bigger scale opined experts at the ninth edition of the National Conference on Social Innovation organized by Pune International Centre (PIC). Convened in association with the National Innovation Foundation (NIF) and Tata Institute of Social Sciences (TISS), NCSI provides a platform to innovators for showcasing their innovations and facilitates collaboration between social innovators, impact investors, and CSR departments of leading corporate houses. This year the two-day conference was held virtually.

In his keynote address, the Chief Guest Mr. Mukundan Ramakrishnan CEO and Managing Director Tata Chemicals said we are living in an age of tremendous change and opportunities. Take the example of the vaccine for Covid which took less than a year which would otherwise have taken years. It was a tremendous innovation where science has been applied for social good. Its rollout in India to cover over 1 billion shots in such a short span of time despite all the difficulties, is social delivery at a scale never done before by any other country. It was enabled by the focused efforts of many scientists, doctors, nursing staff, administrators, public sector, private sector, Government, NGOs working together. This was possible because the challenge was enormous, the need was dire, and the forces were aligned to a higher purpose and were bound by values of the common good. When such intersections happen, great innovations happen at a scale.

He added that with the kind of tools that are at hand today in terms of digital and network all over India, we can do wonders in terms of how we do social impact. Many areas like healthcare, sanitation, water, education are key components of social impact change, he said.
What Covid has done is to accelerate the rate of change by increased adoption of tools which leads to greater access to quality and quantity of delivery. So what is driving this inclusive innovation – there are two broad forces viz sustainability and digital. Driven by these two forces, time is ideal for entrepreneurs to drive social impact solutions at scale. Social innovation entrepreneurship is the solution to many things that we see as challenges like extreme inequality, governance, climate change, environmental degradation, access to healthcare, etc. With the rise of digital and social media, new materials are leading the way to enable us to find solutions. Social entrepreneurs are key to resolving these issues as they work at the microscale and by adopting new approaches that challenge the status quo and as these approaches pathway scale we get social change.

Hailing the work being done by Pune International Centre, he added that mentorship is a key for mechanisms to make this social entrepreneurship come alive. It is critical that entrepreneurs get guidance and timely advice. The second element is ensuring companies use CSR funds as a support network for smart experimentation by creating incubation space.

Advising the new age entrepreneurs he said that we should not be daunted by the size of the challenge, but start from unit one and then scale it up. Talent and skills are key as well as the core purpose of the product and creating a culture going beyond the founders, looking up the entire journey as a learning process.

Delivering the opening remarks eminent scientist and President of PIC Dr. Raghunath Mashelkar said that NSCI is a platform for curating social innovators and has provided a platform for more than 150 innovators over the past few years. The purpose is to improve the quality of life of the poorest and marginalized societies. This initiative has spread all over encompassing the entire country. The fact that social innovations identified by PIC have impacted thousands is a satisfying feeling.
The inaugural program included the Anjali Mashelkar Inclusive Innovation Award and was given this year to ‘Sascan’ an emerging healthcare innovation company that developed OralScan, a hand-held imaging device for screening, detection, and biopsy guidance of oral cancer. Dr. Mashelkar gave an overview of the concept of the awards while Sushil Borde gave information about the progress and the impact of the initiative.

While enlightening the audience about various initiatives of the organization, Abhay Vaidya, Director Pune International Centre informed that this year we received 140 applications from 24 states literally from every corner of India. Six in each category have been selected for the finals in each of three categories: tribal, rural, and urban.

The keynote address was followed by the interaction of Chief Guest Mr. Mukundan Ramakrishnan and Dr. Mashelkar with the finalists. The finalists were felicitated with Citations. Prof. Neeraj Hatekar Executive Director, Department of Tribal Development, Government of Maharashtra chaired the tribal innovation session. Mandar Joshi, Head-PIC Social Innovation Lab was hosting the conference.

Dr. Vijay Kelkar, Vice President - PIC, thanked the chief guest and the chair in his concluding remarks on day one of the conference.

18 Social Innovators who were selected as finalists presented their innovations to the august audience of CSR heads, Impact Investors, Accelerators, and many social innovation enthusiasts.
Qonect has developed a Free Digital Health Card that offers an instant discount on medical expenses, and instant loans for medical emergencies with minimum turnaround time. This eases financial constraints and helps meet medical emergency expenditures.

Urdhvam Environmental Technologies have developed a patented smart rainwater harvesting technology, BoreCharger, that recharges and revives failed and low-yielding bore wells at an affordable cost. Their innovative smart rainwater harvesting technology increases recharge multiple times & improves the quantity and quality of irrigation, drinking water bore wells, and reduces tanker costs drastically.
Impact is India’s kindest health app and second-largest rewards for fitness app. Every step taken, every minute meditated with the app earns you coins that you can choose to donate to causes or win rewards with. To date, our 2.36Mn strong community has covered 80Cr km to raise Rs. 180Cr+ for 50+ social causes. In the next five years, we aim to be one of the world’s biggest health and wellness brands.

Manipur-based Qonect, Pune-based Urdhvam Environmental Technologies, and Mumbai-based Green Freedom bagged this year’s Social Innovation Awards given by Pune International Centre (PIC). The awards were given away at the valedictory function of the 9th National Conference on Social Innovation (NCSI), a flagship event of the Pune International Centre (PIC).

The winners were awarded in tribal, rural, and urban categories respectively in presence of Chief Guest and Founder Chair, Mann Deshi Bank and Foundation, Ms. Chetana Gala Sinha, Abhay Vaidya Director PIC, Mandar Joshi Head- Social Innovation Lab, PIC, Geetanjali Patil Choori Founder Energy Guru, Reema Sathe Founder Happy Roots.

The winners were awarded a cash prize of Rs 50,000 each and a two-year mentorship program from PIC Social Innovation Lab. The two-day virtual program saw 18 finalists across three categories who were selected from over 140 entries from across 24 states.
In her keynote address Ms. Chetana Gala Sinha said that the younger generation of today has much more bigger vision of people and planet. These young innovators will make India valuable. They are putting in time, energy, hard work, persistence and also taking risk and the country should be proud of all of these youngsters. Our Country needs passionate people like these. Any sustainable index will be achieved only through young passionate innovators. Sharing her own experience of working with last mile rural communities she added that I have learnt a lot from ordinary women doing extraordinary things and thinking beyond themselves. Their vision may not come from books, you understand their vision with your experience of working with them.

The two-day conference saw various sessions on tribal, rural, and urban innovations which included presentations by the participants and interaction with various experts. NCSI 2021 has been organized by PIC along with the National Innovation Foundation, and Tata Institute of Social Sciences (TISS, Mumbai) and provides innovators a platform to showcase their innovations and offer them several benefits.

Gireendra Kasmalkar, Director - Ideas to Impacts and member and mentor at PIC proposed the vote of thanks.
सामाजिक नवजोत्साहकं भूमिका
महत्त्वाची : मुकुदंद रामकृष्णन

पुस्तक के साथ आवंतित विवरण

NCSI NATIONAL CONFERENCE ON SOCIAL INNOVATION
TRIBAL INNOVATORS
Problem:

People use fertile soil to make mud brick resulting in barren soil and cement bricks which are not eco-friendly in nature and not suitable for a climate like Ladakh with no heat insulation properties. Upcycle Ladakh makes passive solar bricks from old demolished mud blocks which stop soil erosion and burning of wood and kerosene in winters and help to reduce carbon footprint and climate change like flash floods in hilly areas.

Solution:

The product - upcycled passive solar mud-brick is made from old waste demolished mud brick which has thermal retention qualities needed in winters. Barley straw, face mask, wood shaving in mud-brick, and plastic bottles are used to make a hollow mud brick. Currently, there are only normal mud bricks and cement bricks which are costly and not value-based products. Upcycle Ladakh’s product has the same price as a normal brick, but is more value-based for consumers.

Scalability & Impact:

Upcycle Ladakh is trying to set up a local factory in Leh in collaboration with the Leh municipality committee to make passive solar toilets in the main town for locals and tourists. The brick is mainly sold to lower-middle and middle-class families to help them to live a comfortable life in winters and save money spent on wood and kerosene. The customer segment is vast - from village houses to city and government projects and army habitation stations.
Name of the Innovator: Mr. Vivek Kumar
Organisation: Kshamatalaya Foundation
Location: Udaipur, Rajasthan

Problem:
Kshamatalaya was envisioned and conceived after having witnessed the large spread of inequality and inequity in the education system in the tribal-rural block of Kotra, Udaipur. There was an emergent need to bring in a qualitative shift in the educational ecosystem of the area. The literacy rate of the area is less than 25% whereas the literacy rate for females is less than 12%. This reflects the larger institutional failure and need of creating spaces within the communities to unlock their true potential. There was an emergent need of building local leadership to improve governance and bring more accountability.

Solution:
Working on the child and the ecosystem- directly and indirectly by focusing on the child, demonstrating quality learning through developing centers of excellence in each school, Creating opportunities for children to explore, and more.

For strengthening the education ecosystem, Kshamatalaya has a Cluster Excellence Learning lab- iDiscover Fellowship. The Community-Driven Learning Engagement has a Kshamta-Sathi Program which is focused on ensuring the attainment of Foundation Literacy.

Learning Festivals are six-day programs to revive the spirit of learning and increase parental participation and engagement in the process of learning. Kshamatalaya had been extending its support and actively looking for opportunities to collaborate with the Government and several other CSOs on different aspects of educational interventions.

Scalability & Impact:
The beneficiaries are as follows:
- 10,000+ Children through Direct Engagement
- 10,446 Community Members
- 6953 Teachers
- 140 Facilitators
- 1,20,000+ Children through virtual engagement
- 519 Out of school children
- 255 Learning Festivals
- 38 Panchayats
Name of the Innovator: Mr. Sameer Kumar Misra  
Organization: NavKaushal  
Location: Berhampur, Odisha

**Problem:**

After Sameer Kumar Misra came to Odisha on an SBI Youth for India fellowship to work with Gram Vikas, he saw how rural schools function. He noticed that there is a lot to be done. And his experience in design projects in the college told him that a lab needs to exist where students from a very young age could make models using the locally available materials which could gradually increase their levels to more complex models. With this vision, he started working with middle school kids in Gram Vikas Vidya Vihar, a small school located in a remote village called Rudhapadar between the scenic Eastern Ghats in Ganjam district of Odisha.

**Solution:**

At first, Sameer collected samples and gave them to the kids by himself guiding them to make simple models. Then he focused on scientific things. The idea was that if kids make models of the things that are invented in other countries using local material all by themselves, it would enhance their creativity and give them the confidence and vision to invent something for their own country when they grow up.

He has just finished setting up the Atal Tinkering Lab, funded by the Government of India. This school has become the only rural tribal residential school in India to have such a lab. The material is locally sourced. This is done so the rural kids can receive the same level of education as their city counterparts at an affordable cost. This also helps them develop entrepreneurial skills which help tackle the migration and unemployment problem. Lastly, the kids find a fun way to learn especially in times of the pandemic when kids are at home.

**Scalability & Impact:**

Currently, NavKaushal is operating as an initiative and has set up a lab in 2 schools in Odisha. There are science programs running in two more tribal schools in remote villages in the districts of Ganjam, Gajapati, and Kalahandi in Odisha.

1200 tribal kids have been impacted. NavKaushal is also in talks with students of slums in Kachchi Basti, Jaipur to expand the program there. Most of these students are first-generation learners whose parents are either farmers or laborers.
Name of the Innovator: Mr. Bhupendra Mishra  
Organisation: The Resilient Foundation (TRF)  
Location: Palghar, Maharashtra

Problem:

Disaster is not a new term, an increasing trend of disasters can be seen worldwide. In any disaster, children are the most vulnerable. Thus, creating a safe space along with building capacity to face disaster as the first responder in need of time.

India’s schools suffer from various disasters which lead to loss of lives and infrastructure. Most lack the capability to manage this. It is imperative to close this gap to make our schools, a key social infrastructure, more resilient in hard (structure, exits, equipment, safety measures) and soft (sensitization, capacity-building, adherence) aspects to tackle such crises and emerge safer.

Solution:

TRF is aiming to build resilient communities and has chosen schools as an entry point. The program is laid down as per the national school safety guidelines given by the national disaster management authority. It is being made more advanced by bringing advanced and relevant content in capacity-building. TRF is also working on the Disaster Resilience Index, a numeric base index to map hazards and vulnerability to ease down the process of mapping of Disaster which is currently unavailable.

Scalability & Impact:

In the past three years, TRF has reached up to 5000 beneficiaries, conducted capacity building programs in 4 districts of Maharashtra, 2 districts of Uttrakhand, and 2 districts in Delhi, and has covered more than 70 schools in total.
Name of the Innovator: Mr. Sachin Dhande
Organisation: IRDO Pvt Ltd
Location: Pune, Maharashtra

Problem:
IRDO Pvt Ltd has a mission to “Reach at each Dark Place with Solar Lantern”. It addresses the need of the situation in the rural and tribal areas by reaching needy locations by assembling these lanterns and conducting training workshops.

Solution:
IRDO's products Arun, Ravi, and Bhaskar are Solar Lanterns that can be assembled by Blind and uneducated people. The products are useful for them at home, farms, cowsheds, etc.

By assembling these products, they can get some basic knowledge of renewable energy while earning. Recently, IRDO added the Jyotirgamaya initiative of 3 watts to 3 KW solar power generation by uneducated masses can help to reach at needy places to cater to further issues related to power.

Scalability & Impact:
Currently, IRDO manufactures more than 1000 lanterns in a day. The capacity is to manufacture more than 5000 lanterns in a day.

IRDO can manage to produce 20 Prabhat systems a day of 15-watt solar panels.
Name of the Innovator: Mr. Lian Thangvung
Organisation: Qonect
Location: Churachandpur, Manipur

Problem:
62% of the Indian Population accounts for spending money out of their own pocket to meet the high cost of medical expenses. This is so as they do not have health insurance and ease of access to finance medical emergencies.

Low & middle-class families have financial constrain for medical emergencies as they do not have the means to trim for an emergency fund.

Solution:
The Qonect platform offers instant discounts that reduce the cost of medical expenses and offers instant access to funding to ease the financial constraint of medical emergency expenses.

Qonect has a Free Digital Health Card that offers an instant discount on medical expenses, and an instant loan for a medical emergency with an instant turnaround time to ease the financial constraints to meet medical emergency expenditure.

Scalability & Impact:
Currently, Qonect has 5731 users, and 223 Network hospitals & partners.
RURAL INNOVATORS
Name of the Innovator: Mr. Ahmer Bashir Shah  
Organisation: BB & GG  
Location: Srinagar, Jammu & Kashmir

Problem:

125 million kgs of human hair waste from salons, temples and 350 million tonnes of chicken poultry wastes are generated in India annually. These keratinous wastes take more than 50 years to decompose naturally that too when provided perfect temperature and pH.

In fact, no feasible waste treatment plan is present for these two quantum solid wastes in India besides rough burning and landfilling. On a similar note, it's very concerning that the agricultural index of India has drastically decreased from 8.71% to 2.61% over the past 50 years and that is only due to the rough use of chemical fertilizers in Indian agricultural systems.

Solution:

The project is an initiative under Swachh Bharat Abhiyaan and Atme Nirbhar Bharat Abhiyaan of India. BB & GG started creating a novel organic fertilizer from the quantum keratinous wastes generated and providing viably it to poor farmers in India. The innovative technology has been successful in converting all the keratinous wastes (human hair & Poultry feather wastes) within just 50 minutes of the eco-friendly process into NPK, amino acids, and micronutrient-rich novel organic liquid fertilizer “KeraH-GroW” which is either sprayed directly on crops as foliar spray or applied into the soil through drip fertigation systems or used as a liquid nutrient film in hydroponics systems.

As per study trials conducted in state agricultural university the product increases yield by 15% for farmers as compared to using chemical inputs like urea, potash, and other Plant Growth Regulators.

Scalability & Impact:

For procuring these wastes, more than 100 collection bins have been installed at identified source points in the city comprising salons and local vendors. The daily production capacity of the unit is about 200 L from about 10 kgs of these keratinous wastes procured daily.

In the next 2 years, the daily production capacity is to be increased to 1000 liters per day from around 50 kgs of the wastes to be procured daily. In the first year of operation around 3000 kgs of the wastes shall be neutralized and converted into biofertilizer.
Name of the Innovator: Mr. Rahul Bakare  
Organization: Urdhvam Environmental Technologies Pvt Ltd  
Location: Pune, Maharashtra

**Problem:**  
80% of India depends on groundwater for drinking, domestic, industrial, and agricultural usage. Due to lack of recharge, 4.5 Crore borewells are yielding lesser groundwater & drying up rapidly, resulting in adverse socio-economic impacts such as farmer suicides, unsustainable farming, drought-prone villages, unviable industries and thirsty habitations.

**Solution:**  
BoreCharger is an innovative, affordable, and smart rainwater harvesting and recharge solution that substantially improves borewell recharge 4 to 20 times, drastically improves borewell production, enhances water quality and longevity of groundwater supply.

There are no current competitors with similar technology. The closest competitors are Bhungroo and the typical Rainwater Harvesting Pit Recharge method implemented by NGOs/Govt Departments. These are 3-5 times costlier, ineffective & inefficient solutions, and need maintenance. They also need more space, time, and a surface water source such as a stream or rooftop. They can recharge only during the rainy season. BoreCharger is a Patent Pending Technology. 4-5 times cheaper, needs only 3 hours, uses existing borewells, doesn’t need space, can recharge 2-40 times more water during and after the rainy season is over.

**Scalability & Impact:**  
1300+ Borewells recharged with BoreCharger Technology, 2000+ Number of Beneficiaries, Implementations in 9 states of India (Rajasthan, Maharashtra, Gujarat, Telangana, Karnataka, Tamil Nadu, Madhya Pradesh, Haryana, Orissa), implementations internationally in Benin-West Africa.
Name of the Innovator: Ms. Sumedha Joglekar
Organisation: VAANI Deaf Children's Foundation
Location: Bangalore, Karnataka

Problem:
Hearing-impaired children cannot comprehend spoken language until they are supported with early educational intervention services. An undiagnosed three-year-old deaf child will only know about 25 spoken words, compared to 700 words for a hearing child of the same age. Pre-lingual hearing impairment impacts speech, cognitive development and further destroys chances of education and employment. That is the reason they are left behind and drop out of the educational process. That is why it becomes vital to develop tools that would support parents and teachers towards enhancing their linguistic comprehension. The best way to enhance their language and communication skills is to use visual media.

Solution:
The innovative implementation, Voice To Visualisation tool (VVT), allows an introduction to new words and sentences in a sequential manner, first visuals, then sign language equivalent, and lastly the regular language text. This tool, primarily developed for the English language, is flexible enough to adapt to various regional languages. The tool offers all the features of the language simultaneously on a single dashboard (such as Writing, image display, Indian sign language (ISL), and text for building reading readiness).

In pandemic situations, such innovation comes very handily for teachers and parents as face-to-face sessions are not always possible. In such a case, parents could be equipped with the credentials to use the tool and they could impart language and communication to their deaf child in a natural home setting. For teachers, while conducting online sessions, this tool could be used very effectively for teaching vocabulary and imparting different concepts.

Scalability & Impact:
Vaani has programs that are operating in the states of Assam, West Bengal, and Karnataka with 2100 stakeholders comprising of 700 hearing-impaired children and 1400 parents. This tool has been developed primarily for imparting educational instruction to our own students. However, the intention is to make it public for other organizations working in the speech and hearing field.
Problem:

Approximately 55 million Indians become poor because of healthcare bills every year. And then there are those who opt out of healthcare or find it inaccessible. There are few models that seem to re-engineer processes and make do with what is available, and very few interventions seem to harness the potential of compliance to medical protocols on a case-by-case basis. Most interventions seem focused on a particular disease, geography, medical specialty, or capacity building. A result is a fragmented approach to what is essentially a sector-wide problem of efficient and effective healthcare delivery. The need seems to be an inter-mediator who could partner with each stakeholder for an interim period to absorb inefficiencies while they realign their individual interests with the interests of every other stakeholder.

Solution:

A seamlessly collaborative virtual clinical network, an undercurrent that aggregates all non-core activity of all healthcare stakeholders to facilitate their core effectiveness. Establish replicating fractals of healthcare clusters in wide geographies through non-profit partners to deliver comprehensive, end-to-end healthcare.

Meditorus helps to onboard the whole network of general practitioners, nurses, and community outreach onto a single virtual clinical network. The patient just needs to make a missed call to connect. The platform matches the patient to the exact skill-set they need. Marginalized patients are matched to existing, unused capacity of the health sector - consultations, procedures, and surgeries that would otherwise be unaffordable. It also allows health practitioners and units to contribute their free time to Universal Healthcare.

Scalability & Impact:

Over the last project, Dakshas has scaled six times, treating over 42,013 unique complaints with 120,104 treatment sessions and 200 surgeries. It has had a significant impact, containing the cost of healthcare to Rs.251/patient, saving 2.4 crores in out-of-pocket expenses and over 1600 working days for specialists. It was deployed across 5 settings and roped in 12 external clinical partners.
Name of the Innovator: Mr. Niranjan Karagi  
Organisation: NirNal Water Filter  
Location: Belgaum, Karnataka

**Problem:**

In many places in India or across the world, safe or pure drinking water is a big concern for most. The NirNal Water Filter-Reusable water bottle/tap with integrated disposal filter.

**Solution:**

"Niral Water Filter” Purity in your pocket - A flexible portable water filter device includes an approach for filtering unfiltered ground/ tap water within the bottle or can be connected to the tap. This device has a porous housing that contains activated carbon, ultra-filtration & other filter materials (such as polypropylene cotton, filter paper, colloidal silver, etc.) and can be attached and removed from a water bottle as a unit.

The portable water filter device is fluid-tightly attached to the bottleneck or tap. This portable water filter device is designed to be in any PET plastic water bottle generally available, as well as a tap. Water is filtered when pressure is generated by squeezing the bottle. The pressure forces the bottle cavity through the filter along an axial filtering flow path, designed for the removal of a variety of biological, organic, or inorganic contaminants. Drinkable filtered water comes out through a spout. The device is expected to purify water up to 1500 liters, after which, the filtered water will stop coming through the spout.

**Scalability & Impact:**

More than 2,00,000 portable water filters have been supplied to Government, Schools, Farmers, defense personnel, athletes, and Laborers in India. 2000+ Filters supplied to Indian Army, CRPF Commando & INS Vikramaditya.

Recently, more than 10,000 Filters were given to Assam Floods, Maharashtra & Karnataka. Portable Filters were supplied to Mumbai police during the Covid Pandemic in 2020. The filters have also been supplied to Africa, Singapore, Indonesia, Qatar, the USA, and many other neighboring countries.
Problem:

In rainfed areas, farmers are not able to feed green fodder to the cattle throughout the year, and in India, the green fodder deficit is around 23%. Farmers’ lands are becoming infertile using harmful pesticides, lack of land and water availability.

Solution:

AutoStudio has made a smart Solar Operated Hydroponics Fodder System, using which Farmers are able to grow green fodder at home. No need to engage their farmland.

In the 24 tray setup, AutoStudio can grow up to 30kg of green fodder per day, which requires just 16 sq. ft of area and less than 20 liters of water per day. Talking about the benefits of using Hydroponics Technology, cattle stays healthy, increase in milk fat, and quantity.

Scalability & Impact:

These problems identified and the result of our products are useful not only for first-time use as well as recurring usage and need for small-scale farmers, self-help groups (women entrepreneurs) who are into cattle feed, milk, animal grow of sheep, goat, etc. This segment is huge and the requirement is recurring all over India.

Currently working in Karnataka, Andra Pradesh, Telangana, and Maharashtra State, and installed 120+ Solar Operated Hydroponics Fodder Units and 1000+ Multipurpose Sprayer Machines throughout India.
URBAN INNOVATORS
Problem:

There are an estimated 1.2 billion people with disabilities worldwide. 1 in 5 of the poorest people in the world have disabilities. Skill Development and Employment is the only opportunity for people with disabilities (PwD) to exhibit their talent, demonstrate their abilities, grow capabilities and overcome the stigma/barrier of disability. However, there are several challenges for PwD to enter the job market- lack of education, lack of financial resources, accessible workspaces, attitudes of employers.

Solution:

MITTI was founded with an aim to create platforms for persons with disabilities to showcase their abundant potential for productive activity and create awareness for the cause of equal opportunities in employment. The problem is not that there are a billion people with disabilities in the world. The problem is the inability in the perception that restricts people from believing in the potential every individual with disabilities has.

MITTI Café aims at creating stories of economic independence and dignity through livelihood via inclusive cafes and outreach initiatives that could generate awareness about inclusion. For this, MITTI uses food as a medium to connect, bind and create sustainable livelihood opportunities for our beneficiaries. As part of its livelihood development initiative, MITTI provides experiential training and employment to adults with physical, intellectual, and psychiatric disabilities through the creation of inclusive cafes within corporate and educational spaces.

Scalability & Impact:

16 MITTI cafes are operating in different locations like Karnataka, West Bengal & Odisha where over 6 million food & beverages have been served in the last few years to help reach the masses and spread awareness about inclusion.

In the last few years, MITTI has provided training to over 800+ PwDs to empower them with the skills and confidence to start their careers. Mitti has curated and distributed 8000 Gift hampers to corporate partners and customers on various occasions thus spreading the message of inclusion with every gift.
Problem:

In today's time, technology has made people's life convenient but also lethargic. Digital addiction is the biggest challenge of this decade. Neck and back problems have become common with continuous sitting.

Impact is trying to get people away from their screens, up from their chairs, out of their beds to enjoy quality time with nature.

Solution:

Impact App is a health app that donates money to social causes when you walk. It motivates people to take care of their health by giving them the happiness of helping someone through their steps. It motivates people to take action for better health.

The concept is a first of its kind in India and motivates people to start actively working towards better health. Impact partners with companies and NGOs. Companies sponsor people's workouts and the money directly goes to deserving non-profits for on-ground impact.

Scalability & Impact:

Impact has a community of 25 lakh changemakers on the app who have collectively covered more than 72 crore km to donate more than 163 crore Rs to NGO partners in the last 5 years.

Through the support of corporate partners like Mahindra, Hero, Vedanta, Marico, and others, Impact has been able to help lakhs of people in categories ranging from Education, Hunger, Women Empowerment, Environment to Disaster relief, Healthcare and livelihood development, pan India.
Problem:

The housing affordability crisis is one of the biggest challenges the world is facing today. Access to decent, 'affordable housing' is fundamental to the health and well-being of people and the smooth functioning of economies. Most cities struggle with the dual challenges of housing their poorest citizens and providing housing at a reasonable cost for low and middle-income populations. The huge affordable housing demand and inadequate supply have created a big void in the market.

Solution:

Hexpressions is a product service innovation providing affordable, fast, modular, and sustainable homes to all sections of the society with a new age construction material called "Composite Paper Honeycomb Panel". This new age wonder material has the capacity to replace the traditional construction materials and reduce the carbon footprint on the planet. The project largely focuses on environmental issues (paper waste) and societal issues (housing affordability & social integration) addressing the housing affordability crisis and social exclusion from society.

The aim of the project is to support underserved communities with a permanent shelter. The solution empowers people by providing training and skill development to build their own homes and live a dignified life. Composite Paper Honeycomb Panel combines with plywood, steel, plastics, FRP, and many other materials as the combination faces to form some of the strongest composite panels for its weight and dimensions. It is also more economical than most materials, thereby making it an ideal choice. As a product made from recycled paper and eco-friendly glue, it is a boon to the earth as a 100% bio-degradable, non-polluting, eco-friendly material. Large-scale usage of paper honeycomb can drastically boost the aim of preserving nature.

Scalability & Impact:

The innovative & sustainable construction system transforms the complete life cycle of the built environment, literally. During the construction process, panels on-site are fabricated to minimize the transportation cost and installation time. In the end, when the product life cycle is over, the panels are dismantled and sent for recycling. Hence the overall carbon footprint on the planet will be 80% lesser, 10x faster, 30% more economical than any traditional construction methods presently available in the market.
Problem:

India is the world’s 3rd largest waste generator of which majorly is contributed by Plastic waste and construction & demolition (C&D) waste. Annually, India generates around 14.3 million tons of plastic waste & 200 million tons of C&D waste. This waste causes floods by clogging drains, causing respiratory issues when burned, shortening animal lifespans when consumed, and contaminating water bodies when dumped into canals and oceans. Even when plastic waste is collected, many countries lack the capacity to process and recycle the waste.

Solution:

Angirus has developed an eco-friendly and sustainable technology to make bricks using major waste generated in the country. The innovative technology combines Plastic waste and other Municipal waste synergistically to make lightweight and waterproof bricks with zero carbon footprint.

Scalability & Impact:

Currently, at the pilot stage, Angirus is awaiting for initial funding to kickstart the production. The prototype machine can produce 5 bricks a day.
Problem:

The Government of India spends a lot of money on over 400 welfare schemes/policies to benefit disadvantaged communities. However, they have not achieved the desired impact due to lack of awareness, poor use of technology, and corruption.

Solution:

The Vision of Saaras Foundation, "Empowering the lives of disadvantaged communities by increasing their access to welfare policies" focuses on addressing information poverty by acting as a facilitator supporting sustainable access to policies in a fair manner.

Currently, the organization is working on the Right to Education and Pradhan Mantri Matru Vandana Yojana Scheme in Uttar Pradesh. RTE - 6 lakh potential seats but fill rate is less than 10%.

PMMVY(Pradhan Mantri Matru Vandana Yojana) - In India, every third woman is undernourished and every second woman is anemic. An undernourished mother almost inevitably gives birth to a low birth weight baby. More than 68% of total under-five deaths in the U.P. are related to malnutrition. The urban areas are facing more challenges to get access to schemes/policies related to it.

Beneficiaries are supported via the help of technology to provide 360-degree support viz. information dissemination, grievance redressal, besides filing applications with the support of trained community volunteers, which makes the process self-sustainable and the community self-reliant.

Scalability & Impact:

The organization is working with Economical Weaker Section and Disadvantage groups of people. In the last 4 years, Saaras has made 75,239 citizens aware of their rights and supported 20,150 citizens to gain the access to their much-needed benefits. The organization is directly working in three districts of Uttar Pradesh - Lucknow, Kanpur, and Ambedkar Nagar. The organization has a presence in 6 more districts with the support of partner organizations and community champions.
Problem:
Waste is created every day, every moment. We are slowly creating mountains of waste which are creating sanitation problems. The burning of waste in landfills results in air pollution, and simply transporting the waste from our houses to far-off landfills results in increased carbon emissions. The landfills then create huge mountainous piles of waste which attracts ragpickers to collect valuables from the pile while coming in contact with rodents endangering their safety. They are exposed to medical waste, harmful gases.

Solution:
Klimrus deals with the problem of using Solar powered composting devices that deal with wet waste, mask, sanitary pads and convert it into compost.

The machine is a solar-powered composter that converts waste into fertilizer. It can be installed in housing societies, individual homes, restaurants, resorts, hotels, etc. It uses bacteria to convert waste into compost.

Scalability & Impact:
The machines are currently treating 1 tonne of waste per day and converting it into compost and preventing it from reaching the landfill area. The goal is to improve upon this further and prevent a huge amount of waste from reaching landfills. Our beneficiaries are saving money by using compost produced from their own waste. They are now aware of the segregation of waste and its importance for waste management. The beneficiaries also are planting more trees due to the abundance of compost and initiating workshops for gardening to encourage urban gardening and farming as well.

Klimrus works with local municipal bodies to ensure that beneficiaries are provided with the rebates and tax benefits from the property tax paid to the civic bodies for sustainably recycling the waste at the source. The amount of money saved provides a fiscal stimulus to the sustainable waste management sector. The machines provided by Klimrus are also at a much lower cost than the alternatives available in the market, thus providing more savings to the beneficiaries. Klimrus also helps consumers set up workshops to understand urban farming and gardening.
Pune International Centre (PIC)

Pune International Centre (PIC), launched in September 2011, is an independent ‘Think Tank’ which deliberates on issues of national importance and contributes to policy-making in India. Its membership comprises 400+ eminent individuals, 50+ national institutes, and several leading corporate, from all over India and world, who pool together their resources, capabilities, and experience in shaping the papers and programs produced by PIC.

PIC in association with National Innovation Foundation (NIF) and Tata Institute of Social Sciences (TISS) has been organizing the National Conference on Social Innovation (NCSI) annually since 2013.

The National Conference on Social Innovation (NCSI) is a unique platform that gives an opportunity to innovators from every sphere of life to present their Innovations on a national level. NCSI has hosted innovators from all possible sectors such as Health, Education, Livelihood, Sanitation, Technology, etc.

NCSI has largely focused on bringing the grass root innovators to the forefront. The objective of this conference is to be able to connect Innovators with CSRs in order to facilitate their collaboration and in the process help the Innovators gain the assistance and impetus they need. Social Innovation is one of the most potent developments of our times and Pune International Centre (PIC) endeavors to work towards the strengthening and promotion of Social Innovation through the NCSI every year.

Contact:

: si.puneinternationalcentre.org

: si@puneinternationalcentre.org

: +91 7722071005 or +91 7722071006
ABOUT THE ORGANIZERS

National Innovation Foundation (NIF)

Drawing upon the Honey Bee Network (HBN) philosophy, the National Innovation Foundation (NIF) - India was set up in March 2000 with the assistance of the Department of Science and Technology, Government of India. It is India's national initiative to strengthen grassroots technological innovations and outstanding traditional knowledge. Its mission is to help India become a creative and knowledge-based society by expanding policy and institutional space for grassroots technological innovators. NIF scouts, supports and spawns grassroots innovations developed by individuals and local communities in any technological field, helping in human survival without any help from the formal sector. NIF helps grassroots innovators and outstanding traditional knowledge holders get due recognition, respect, and reward for their innovations. It also tries to ensure that such innovations spread widely through commercial and/or non-commercial channels, generating material or nonmaterial incentives for them and others involved in the value chain.

Tata Institute of Social Sciences (TISS)

The Tata Institute of Social Sciences (TISS) was established in 1936 as the Sir Dorabji Tata Graduate School of Social Work. In 1944, it was renamed the Tata Institute of Social Sciences. Since its inception, the Vision of the TISS has been to be an institution of excellence in higher education that continually responds to changing social realities through the development and application of knowledge, towards creating a people-centered, ecologically sustainable, and just society that promotes and protects the dignity, equality, social justice and human rights for all. In pursuance of its vision and guiding principles, the Tata Institute of Social Sciences organizes teaching programs to facilitate the development of competent and committed professionals for practice, research, and teaching; undertakes research; develops and disseminates knowledge; and reaches out to the larger community through extension, at the local, national, regional and international levels.