

Conversations Today

Your journal about the world of NGOs and Social Enterprises

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FROM THE EDITOR

Dear Reader,

In today's world, where data reigns supreme, the significance of project indicators and robust data collection methodologies cannot be overstated. Every piece of data collected is a thread in the fabric of understanding, guiding us towards informed decisions and impactful actions. In CSR initiatives, these indicators serve as compass points, guiding organisations towards their social objectives, ensuring accountability, transparency, and tangible impact.

However, data alone does not suffice; effective interpretation is paramount. Like an artist with a palette of colors, we must skillfully blend and interpret data to reveal the true picture. It's not merely about numbers and figures but about uncovering insights, identifying patterns, and extracting actionable intelligence. Effective data interpretation is the cornerstone of informed decision-making, enabling organisations to pivot strategies, allocate resources wisely, and maximise their social impact.

Yet, the journey doesn't end with interpretation; it begins there. How do we effectively set M&E strategies for impact projects? This question lies at the heart of our endeavors. A robust M&E strategy is not a mere formality but a roadmap to success. It outlines the objectives, defines the methodologies, establishes clear metrics, and delineates the pathways for continuous improvement. It's a dynamic process that evolves alongside the project, ensuring alignment with goals and adaptability to changing circumstances.

Moreover, let's not overlook the transformative power of impact reporting. Impact reports are not just documents; they are narratives of change, testimonies of commitment, and beacons of hope. They communicate the journey, the challenges, the triumphs, and, most importantly, the difference made in people's lives. In today's era of accountability and stakeholder engagement, impact reports are indispensable. They foster transparency, build trust, and inspire others to join the journey towards a better tomorrow.

As we delve into discussions and share insights today, let us remember our collective purpose: to harness the power of data for good, to weave stories of impact from threads of information, and to navigate the complexities of social responsibility with wisdom and foresight.

Together, let us pave the way for a future where every data point represents a step towards a more sustainable, equitable, and prosperous world.

Marie Banu Rodriguez

EDITORIAL

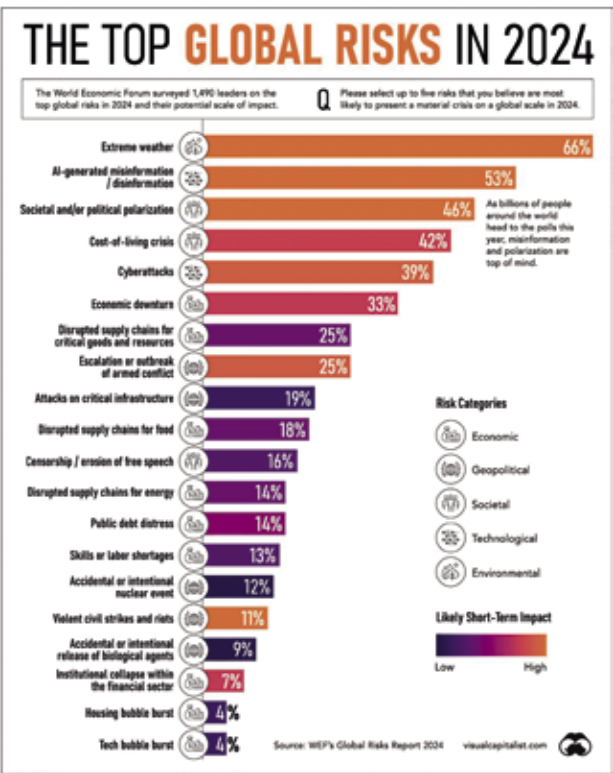
Latha Suresh
Marie Banu Rodriguez

UNMASKING INDIA'S VULNERABILITY: THE NEXUS OF AI DEEPFAKES AND POLARIZATION

In recent years, India has found itself grappling with the twin challenges of AI deepfakes and polarisation, a phenomenon that threatens the fabric of its society and democratic principles. The convergence of advanced artificial intelligence technology and deep-rooted societal divisions has created fertile ground for the proliferation of manipulated media content and the exacerbation of existing tensions. This convergence poses multifaceted challenges to the nation's social fabric, political stability, and the integrity of its information ecosystem.

The graph shows the top global risks in 2024 listed by World Economic Forum AI deepfakes, hyper-realistic manipulated media generated using machine learning algorithms, have become increasingly prevalent in India. The accessibility of AI tools and the widespread availability of online platforms have empowered individuals and groups to create and disseminate deceptive content at an unprecedented scale. From political propaganda to fake news and malicious hoaxes, AI deepfakes have emerged as a potent weapon for those seeking to manipulate public opinion and sow discord.

India's diverse social landscape, characterised by religious, linguistic, and caste-based identities, provides ample fodder for polarisation.



Political actors and vested interests often exploit these fault lines to consolidate power and advance their agendas. Advancements in AI-generated Deepfake contents amplifies this polarisation by disseminating misinformation tailored to exploit communal sensitivities and deepen societal divisions.

The unchecked proliferation of AI deepfakes and polarisation poses significant threats to India's democratic framework and social cohesion. Manipulated media content can distort public discourse, undermine trust in democratic institutions, and incite violence.



India is listed in first position where false information is considered as the biggest threat to harmony and development

Furthermore, the erosion of trust in media sources impedes informed decision-making, hindering the functioning of a healthy democracy. If left unchecked, this trend could have far-reaching consequences for India's stability and democratic resilience.

Addressing the challenges posed by AI deepfakes and polarisation requires a multifaceted approach involving technological innovations, regulatory interventions, and societal initiatives. Investments in the development of AI-powered detection tools to identify and mitigate deepfake content are much needed by society. Here are a few suggestions:

- Collaborate with tech companies and research institutions to enhance the resilience of online platforms against information manipulation.
- Enact comprehensive legislation to regulate the creation, dissemination, and use of deepfake technology.
- Expect Government and legislative bodies to take step forward in establishing clear guidelines for platforms to combat the spread of manipulated content while safeguarding freedom of expression.
- Promote media literacy programs to equip citizens with the critical thinking skills necessary to discern misinformation from factual content.
- Empower individuals to verify sources and cross-check information before sharing it online.
- Foster dialogue and mutual understanding across religious and cultural divides to mitigate the potency of identity-based narratives exploited by divisive actors.
- Promote inclusive narratives that celebrate India's diversity and foster empathy and solidarity among its citizens.

The proliferation of AI deepfakes and polarisation poses grave challenges to India's democratic ideals and social harmony. By adopting a proactive approach, India can effectively mitigate the threats posed by manipulated media content and divisive narratives. Only through concerted efforts from all stakeholders can India safeguard its democratic institutions and nurture a more inclusive and resilient society for future generations.

Arulselvi Azhagiri

TRANSFORMING SCHOOLS AND COMMUNITIES

Volunteering has been appealing and inspiring for many years. Social activities have always attracted interested volunteers, irrespective of their age, education and professional barriers. The education sector, in particular, has seen many players trying to address concerns, fix the issues in as many ways as possible. In fact, it is one sector with a vast spectrum of initiatives that attempt improve everything from access to quality. “Education is something all of us can easily relate to. It is something where all of us can imagine better outcomes from different initiatives. We have all been through its strengths and lacunae at some point in time. That experience counts and may be that brought our founders together,” introspects Ms Anu Krithika, Manager at Aram Foundation Charitable Trust (AFCT) in Coimbatore.

Six friends who were actively engaged in the social sector came together in 2012 to do something for children studying in government schools. The Trust was registered and they introduced two programs – one focusing on ‘Safe Touch’ and the other known as ‘Happy Child’ focused on life skills for primary class students. It was a package of ten skills that were imparted through activities. All the curriculum material was prepared by the internal team and the programs reached out to 80 corporation and government schools in 2012 itself. For a new organisation, this was a good record and gave them the confidence to introduce the third program on self-defense. Implemented in higher secondary schools in the city, government colleges and few private colleges in Coimbatore and its neighboring districts, this program gave a new identity to the trust’s efforts.

“One of our Founder Trustees – Mr Gokul Raj himself handled the classes with his team. All basics of abuse was taught diligently – right from definition, types, identifying perpetrators, whom to contact for help and also cyber safety. Drawing from Martial Arts, this one-day program prepared young boys and girls to save themselves from any critical situation,” Anu explains. While it was not a set agenda that the trust worked upon, it was robust societal observations that led to the planning of such contemporarily relevant programs. They also worked to promote awareness on plastic pollution in the schools they were already reaching out to. “The sense of urgency surrounding environmental issues is growing and we do recognise the importance of investing in environmental initiatives to create a more resilient and sustainable future,” she adds.

With all this work speaking for their commitment, Coimbatore City Municipal Corporation’s Commissioner invited



AFCT to run their office from a corporation school campus. They focused more on education and introduced new programs like bridge courses, smart classes, mainstreaming slow learners and also teaching science experiments since 2015. As new CSR partners came forward to support their programs, AFCT carefully widened its reach. “We prioritised the delivery of long-term impact in select schools over spreading our reach to a larger number of schools. We chose to promote the notion of holistic education in these schools and demonstrate the long term impacts of this perspective,” says Anu, introducing AFCT’s Holistic Education that is implemented in 21 schools in Coimbatore district.

The program focusses on skill development, recreation, teacher training, parents training on contemporary education/choices, non formal course options and also training for the School Management Committees (body set up in every school, in adherence to the Right to Education Act). Health was also prioritised and camps were organised on specific days. Nutrition kits with fifteen products were distributed to the students. During the pandemic, it was a new course of efforts to ensure consistent support to the students. AFCT reached out to 112 schools and provided kits to enable the transition to online education. One kit consisted of a tripod stand, ring light, stand, mike, board, smart phone; a training program was also conducted to help teachers adapt to this transition. Even after schools resumed after the lockdowns, masks and sanitizers

were provided to ensure protection. While painting and other infrastructure support for government and corporation schools were a regular feature at AFCT, activities like the above, tailored to attend to current challenges promise underprivileged students that they are definitely a priority and their education is as much important.

Apart from schools, AFCT also entered communities and established Students’ Welfare and Development Centres (SWD) in R S Puram and Selvapuram. The mixed population here comprised of students who were poor, low in awareness, migrants and also from the slums. But all of them needed education support activities to benefit from their regular schooling – so regular tuitions, recreation, skill development classes were conducted in these centres. “Students here not only learnt their lessons but realised themselves as a strong agency when they came together. At the centres, they were all exploring opportunities, keeping their guards down. Breaking the ice was a big challenge but their thirst for growth and prospects took us through,” she recalls.

In order to bond with elder members in the community, awareness programs were also conducted to parents every month. Women were more active in these programs than men and their interest gave room for group work to indulge in health consciousness, alcoholism, etc. Within a year, it was seen that students who initially struggled to even pass in a single subject cleared all their exams. Those who could not read anything were now reading sentences and also forming them to strike a

conversation or write an essay. The impact was profound and the community saw it. AFCT now turned its focus upon menstrual hygiene, having witnessed the stigma around the very act of buying sanitary napkins. “The stigma has now reduced and women are better informed, prepared to handle their menopause. In fact, we at AFCT feel that our awareness on menstrual hygiene has had a deeper impact than that on general health,” reflects Anu.

This success prompted them to venture into an income generation program for the women at Imayam Rehabilitation Centre by setting up resources to manufacture sanitary napkins. All the 20 destitute women here, who were initially very hesitant and skeptical about this business, are now active participants in the manufacturing activity. The women have managed to find many buyers in government colleges and the growth in business volume has encouraged AFCT to provide them with another machine with all raw material. “We counselled them and gave them the resources. They made it all work. They handle all the revenue. It is their business,” she smiles, looking forward to the upcoming impact assessment studies in schools and communities. As it continues to grow and evolve, AFCT reminds that transformation can come only from consistent efforts. “We will try to take opportunities to where it is needed the most,” promises Anu.

—Shanmuga Priya. T

CRAFTING BRILLIANCE

THE ARTISTRY OF NAGALAND'S JEWELRY AND EMBROIDERY

In the northeastern state of Nagaland, where unemployment rates are high and opportunities are limited, one entrepreneur is making a difference. She is Noyingbeni T. Erui, a visionary and passionate individual who has embarked on a mission to empower talented individuals, particularly women, by helping them monetise their skills. With a keen eye for design and a desire to preserve and revitalise traditional craftsmanship, she embarked on a journey to create contemporary pieces that pay homage to Nagaland's cultural heritage while appealing to modern tastes. Let us delve into the inspiring story of Noyingbeni and her venture to create employment opportunities through Erui Designs.

Noyingbeni's journey as a jewellery designer began during her time as an assistant Professor, where she witnessed a pool of talented students who struggled to find avenues for their skills. "In Nagaland, societal pressure often dictates that young individuals pursue government jobs due to the scarcity of employment opportunities. However, the reality is that only a fraction of educated students manage to secure these positions, leaving many talented individuals with limited options for growth and financial independence," says Noyingbeni.

Motivated by this stark reality, Noyingbeni took it upon herself to create a platform for talented students to find employment and capitalise on their skills. Her focus on empowering women is



Noyingbeni initially started designing earrings which were a big hit, and soon enough, she started incorporating embroidery into her designs creating unique and exquisite pieces that garnered attention from people around the world.

What began as an initiative to introduce jewelry making to students soon transformed into a personal journey of discovery and entrepreneurship. The combination of skill development classes and their own enthusiasm led them to embrace jewelry making as a viable career option. They turned their newfound passion into a business, creating unique and captivating jewelry pieces that resonated with customers both locally and beyond.

Discussing her marketing technique she unravels her journey she embarked on Instagram and The turning point in her journey. "Our primary marketing technique is utilising social media platforms, particularly Instagram. Although I wasn't initially socially active on social media, I recognised the potential that Instagram offered in terms of reaching out to a wider audience. By showcasing our unique designs and captivating visuals, we were able to pique the curiosity of potential customers," she says.

"People were intrigued by the shift in my profession and wanted to understand the reasoning behind it. The turning point for us came when we sponsored a beauty pageant called Dokueemon, which is celebrated by my tribe, the Lotha tribe in Nagaland. The sponsorship provided us with an opportunity to showcase our designs to a larger audience. The local TV channel documented the event, and our designs received significant media coverage. This exposure helped attract even more customers, as people saw our creations and were inspired to connect with us," she adds.

Starting a business is not without its challenges, and when transitioning from a different career, it can be even more difficult. In the case of the person being discussed, who was originally an assistant professor for English, there were specific hurdles they faced in the initial stages of their jewelry business.

"One significant challenge was the perception and expectation associated with being an academic. The transition into the business and arts industry meant breaking away from the typical path expected of someone in academia. This change in identity and departure from the conventional career trajectory was met with skepticism and resistance from others. People found it difficult to accept that someone with an established career as a professor would venture into a creative and entrepreneurial field like jewelry making," she says.

Noyingbeni shares her method to stay relevant in this competitive industry. "In the fast-paced world of business and fashion, staying relevant and creative is critical to success. One crucial aspect is keeping up with trends, and this is where research plays a significant role. It's essential to stay up to date with the latest algorithms and trends to stay ahead of the competition," she says.

However, merely following trends is not enough to stand out in the crowd. It's equally essential to hold on to one's values and bring value to the market. To achieve this, many businesses adopt a unique approach, combining trends and value to create

particularly commendable, as she recognises the need to break societal norms and allow women to become financially independent. By establishing her jewelry and embroidery business, she creates opportunities for women to showcase their creativity and contribute to their household income.

One of the remarkable aspects of Noyingbeni's business is her commitment to preserving and reviving traditional crafts. In Nagaland, jewelry-making and embroidery have deep cultural significance and hold immense artistic value. Noyingbeni's venture not only provides employment but also brings attention to these age-old crafts, ensuring their preservation for future generations.

For this young designer, the seeds of her skill development were sowed at a young age. Her mother and grandmother were proficient embroiderers, and she picked up a few tricks along the way. However, this skill remained a simple hobby until later in life when she rediscovered her passion for it while teaching in college.

"My colleague introduced me to modern embroidery, and I started experimenting with the craft, adding my own creativity on it. As I experimented with modern embroidery techniques, people started taking notice, and my hobby gradually turned into a full-fledged business venture," she says.





something truly special. This is the mantra of Erui Designs to keep its designs relevant and valuable. "This approach serves as a reminder that staying relevant in business requires more than just following trends. It's important to find a way to hold on to values and create something that stands out in the market," she says.

By combining tradition, culture, and contemporary design trends, Erui Designs was able to create designs that are truly special and unique, gaining popularity and success in the process. It's a testament to the possibilities that exist when creativity, passion, and cultural heritage are combined in innovative ways in business.

The journey of starting a business is never easy, but by navigating through the initial challenges and staying focused on her craft, Noyingbeni was able to overcome them. Her story serves as an inspiration for others who may be contemplating a career change or embarking on a new entrepreneurial venture. It reminds us that with dedication and perseverance, one can overcome obstacles and find success in pursuing their true passions.

Bhavadharani. K



Centre for Social Initiative and Management

Centre for Social Initiative and Management (CSIM) is a unit of Manava Seva Dharma Samvardhani (MSDS). It is a learning centre that promotes the concept of social entrepreneurship.

CSIM offers training and consultancy to social enterprises – for-profits and non-profits to facilitate them to apply successful business practices and yet retain their social mission. It also offers training and hand holding support to prospective social entrepreneurs and enable them to launch their social initiatives. www.csim.in

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STRIKING A BALANCE

MITIGATING HUMAN-ELEPHANT CONFLICT IN VALPARAI



Spanning approximately 220 square kilometres, the Valparai plateau sustains the livelihoods of thousands while serving as a sanctuary for 120-140 elephants. Yet, the inevitable overlap of space and resources has led to frequent encounters, resulting in casualties, property damage, and crop destruction.

The Nature Conservation Foundation (NCF) stands at the forefront of efforts to address this pressing issue. Through extensive research and collaboration with local communities and forest departments, NCF has implemented innovative, participative, and adaptive interventions aimed at mitigating human-elephant conflict.

The human-elephant conflict stems from habitat loss, human encroachment, and the convergence of space and resource utilisation. Elephants, compelled to traverse human-populated areas due to dwindling forest cover, often encounter unsuspecting individuals, resulting in tragic outcomes for both parties. In Valparai, while crop damage remains relatively low, incidents of property destruction and human casualties loom large.

NCF's approach encompasses practical

fieldwork and scientific analysis. Field teams track elephant movements, gather demographic data, and assess potential conflict scenarios, ensuring timely interventions to safeguard both humans and elephants.

The organisation's multifaceted work extends beyond practical interventions to encompass scientific research and analysis. "We systematically tracks elephant herds and demographic assessments to gain insights into long-term trends and behaviour patterns. This helps us to inform on-the-ground conservation efforts and policy formulation processes," says Ganesh.

NCF has embarked on a mission to mitigate conflict through innovative and participative measures. Collaborating closely with local communities and forest departments, NCF introduced mobile phone technology-based interventions aimed at providing real-time alerts about elephant movements. These initiatives, including bulk SMS texts, voice calls, and mobile-operated alert beacons, have empowered stakeholders to take proactive measures and avoid potential conflicts. Further, light sensors were placed to supplement traditional mitigation measures.

"Recognising that many conflicts stem from accidental encounters due to inadequate information about elephant movements, we have leveraged mobile phone technology to disseminate real-time alerts. Bulk SMS texts, voice calls, and mobile-operated alert beacons strategically placed across the landscape enable residents, plantation workers, and stakeholders to take precautionary measures and avoid potential conflicts," he says.

"By harnessing technological solutions like light sensors and GPS tracking, we monitor elephant movements and mitigate human-elephant conflicts proactively. Furthermore, close collaboration with the forest department ensures that our strategies align with scientific findings and complement existing conservation efforts," he adds.

NCF's research has illuminated the intricate dynamics underlying property damage incidents by elephants. Contrary to common assumptions, the frequency of such incidents is not solely correlated with the duration of elephant presence but influenced by factors such as structure proximity and food storage practices. Armed with this knowledge, NCF

advocates for targeted interventions and emphasises the importance of understanding elephant behaviour patterns.

"Our long-term research efforts have uncovered critical insights into the dynamics of human-elephant conflict. Contrary to conventional wisdom, property damage incidents are not solely dictated by the duration of elephant presence but influenced by factors such as structure proximity and food storage practices. Such findings underscore the complexity of the issue and the need for nuanced interventions," he says.

Navigating the delicate balance between community needs, conservation imperatives, and tourism challenges remains a complex endeavour. While responsible tourism can contribute to local economies, it also heightens the risk of human-elephant conflicts, necessitating careful management and awareness initiatives.

The delicate balance between promoting responsible tourism and ensuring community safety remains a focal point for NCF. While tourism brings visibility and revenue, it also heightens the risk of human-elephant encounters. NCF emphasises the

importance of minimising unnecessary visibility to tourists and promoting safety guidelines to mitigate potential conflicts.

"Throughout the day, we maintain communication with local networks and inform relevant individuals about elephant movements. Sometimes, our plans need to be adjusted, and routes changed based on emerging information. While our primary focus is on tracking specific elephant herds, we remain flexible and responsive to unforeseen events," he says.

"There are instances when we may need to divert our attention to address urgent situations, such as when a different herd attempts to cross a road. This dynamic nature of our work means that we must be prepared to adapt quickly to changing circumstances, even if it means deviating from our original plans," he adds.

Through concerted efforts and unwavering dedication, NCF strives to forge a path towards peaceful cohabitation between humans and elephants, ensuring the preservation of both livelihoods and wildlife for generations to come.

Marie Banu Rodriguez

CARTWHEEL FOUNDATION

EDUCATION FOR PHILIPPINES' SEA GYPSIES



➤ **The Sama-Bajau often face discrimination and exclusion because of language barriers**

MORE VIDEOS

Suraya Saikulah is painfully familiar with the negative stereotypes associated with her tribe, the Sama-Bajau. "We are described as violent. It's said that we throw food at people who won't give us money. That we are dangerous and inflict harm on others," she says.

Such perceptions may be attributed to the prevalence of her indigenous counterparts begging on public transport in the Philippines. But this wasn't always the case. From as far back as Suraya can recall, this was not their way of life.

"The Sama-Bajau are hardworking by nature. Even if fishing is risky, they will do it every day. But now, that's not enough," shares Suraya.

For generations, the sea-dwelling Sama-Bajau relied on their maritime hunting skills and customs to sustain themselves. Then in 2013, armed conflict forced them out of their coastal settlements to seek shelter in evacuation centres in Zamboanga, a densely populated city in Mindanao. Here, disconnected from their culture and traditional livelihood of fishing, they are blighted by a raft of challenges — including discrimination and a lack of access to education, healthcare and employment opportunities.

It's a complex problem that local non-profit organisation Cartwheel Foundation works to unpick, in uplifting the community. Besides helping them to obtain official documents such as birth certificates, which are necessary for accessing basic services, they also provide children with free early childhood education designed to be culturally



➤ **In 2016, it launched a floating classroom in Zamboanga to educate Sama-Bajau children**

relevant.

"Instead of being ashamed of their Bajau identity, we hope that they can see it as a source of strength," explains Rainey Sarmiento-Dolatre, Director of Programmes and Partnerships at Cartwheel Foundation. The organisation also trains individuals from the Sama-Bajau tribe as teachers.

Inside a wooden floating school, these teachers deliver lessons that incorporate words in Tausug — their indigenous dialect — as well as Tagalog and English, to young children. One such mentor is Suraya, who overcame the odds and now wants to advance her community through education.

"Even if we are limited because of our ethnicity, people can see me as a Sama-Bajau who refused to stay at the bottom," she asserts.

And you're never too old to learn,

according to Cartwheel Foundation, which also educates adults and older youths in family health and nutrition, as well as life skills. Already, the initiative has borne fruit.

"Education can have a ripple effect. We've seen members of the greater community acquire basic literacy and numeracy skills and find a more relevant livelihood," shares Rainey. "This allows them to educate one another — mothers can share their knowledge with their children and vice-versa," she adds.

Since being established in 1999, Cartwheel Foundation has supported some 1,200 preschool graduates, and impacted around 12,000 indigenous individuals.

In the same vein of amplifying positive change, Cartwheel Foundation moulds community leaders among promising high school graduates with indigenous roots, by providing support for culturally-relevant

tertiary education and holistic skills. Such initiatives require funding to sustain, so that members of the Sama-Bajau can continue to progress beyond their circumstances.

For Suraya, this is reflected in their newfound ability to communicate with society at large. "Speaking in multiple languages enables them to speak their mind, voicing what they want and do not want other people to do to them," she says, adding that she hopes this can bridge a more "amicable relationship" between her community and other Filipinos.

"I hope they will respect our culture and traditions. It's okay if they cannot give us material things, we just need their respect."

ABOUT CARTWHEEL FOUNDATION

Established in 1999, non-profit organisation Cartwheel Foundation seeks to uplift marginalised Filipino indigenous individuals through education. They believe that Indigenous Peoples have the right to quality education, self-determination and active participation in the community.

A story by Our Better World – the digital storytelling initiative of the Singapore International Foundation
(www.ourbetterworld.org)

WASTE WARRIORS FROM COIMBATORE



Waste management presents a promising industry with the potential to address environmental challenges, promote sustainable development, and generate economic value through resource recovery and innovation. It was not a lucrative job few years ago but had a lot of scope for entrepreneurship because the local bodies needed help. They could not manage the stream of waste that was so effortlessly generated. The exponential growth in the food industry with so many new businesses mushrooming has only added tonnage to the pile. What can two engineering students possibly do about this?

Door to door collection of waste is the responsibility of urban civic bodies and for bulk generators it has very clearly been postulated in the Solid Waste Management Rules of 2016 that they must handle their waste – they must segregate and dispose through authorised dealers. “In fact rules also prohibit use of trash collection bins or drums on road sides. But who really cares about these rules. All they are concerned is about getting rid of their waste,” lament Mr Saran Raj and Mr Prashanth, Founders of Recompose Private Limited.

Friends since childhood, Saran and Prashanth were inclined towards working for the environment. Volunteering with different organisations for cleaning water

bodies, clearing plastic waste, etc was very much a part of their vacations. After graduating in Electrical and Mechanical Engineering respectively, they got into waste management. “This is what we wanted to do because it has a long term impact on both public and environmental health. Our families literally shunned us for choosing to do this,” they laugh. Both of them interned with the Coimbatore City Municipal Corporation (CCMC) for more than six months and also worked with many non-profit organisations like RAAC (Resident Awareness Association of Coimbatore). “Waste Management is a complete industry that is yet to be fully explored. It is very promising in terms of its contribution to sustainable development goals. However, the same old challenges persist. In spite of new stories here and there, a consistent and reliable attitudinal change from the public side has been a big lacuna,” they reflect.

They started their NGO No Dumping in the year 2016. With the CSR support from ACP Cements, they operationalised their service based waste management model in around thirty apartments in Coimbatore. The free service in the first year allowed them to work on all details and build all the nitty-gritties. Gradually their client base grew and what actually worked in their favour was that client could dispose of

their segregated, collected waste any time by making a call request. “Our call centre is very active and we respond to calls within the promised time window. Clients are happy with our service. Unlike the city corporation where it is not service based, our model promised complete waste management. But segregation is their responsibility,” they clarify.

Source segregation is something that can be easily done but not yet easily accepted. Civic bodies are struggling to mainstream this practice and public attitude has a big role to play. “Perhaps, people have gotten so used to convenience that they just don’t seem to think about other humans who actually have to handle their waste with their bare hands. How many parents know that soiled diapers must be cleaned before disposal? Sanitary napkins are burnt in landfills because we are yet to find an effective way to handle them. Let’s not turn a blind eye to the fact that diapers and napkins constitute about 1.5 tons of our everyday collection that reaches up to 45 tons, which is a small drop in the ocean of 1000 tons generated in Coimbatore every single day,” says Prashanth, giving us the bigger picture which we often don’t get to realise at all. A lot of this has also got to do with the fact that waste management is not yet a part of mainstream social discussion unless there is a catastrophe like floods.

Recompose was started as a private limited company in the year 2020 to be able to invest in research and development in the sector. Handling about 450 customers in the city that includes apartments, malls, hospitals, IT parks, etc, Recompose has carefully worked out three models to suit the needs of its clients – individual flats pay a monthly fee for

collection and handling of waste; then there is the bin based model suitable for commercial places where bin is collected every time it is full. The third model is for the bulk generators – load based model where they are charged per load they create. These the ones who create about 2-3 tons on a daily basis. With a fleet capacity of 20 vehicles that run on compressed natural gas, Recompose’s every operational decision has been trying to protect the environment in any which way possible.

All the waste collected is further segregated – organics go for dry composting and the compost is then given to farmers for free. Biomass briquettes are also produced and sold as a source of fuel. This project was supported by Bosch and Raac. The inorganic waste is segregated into 14 categories – recyclables go for recycling (eg, plastic goes to local dealers, paper material is sent to ITC as they recycle paper) while the non recyclables go to cement factories. “It is basically a multitude of processes and a chain of local players all of whom work in sync to ensure that waste does not settle in the landfills. Coimbatore once had 4 dump yards and now we have only one. That explains the significance of our work,” asserts Saran Raj.

Recompose looks forward to designing and making products from waste itself to be used in waste management. “That is how we can reduce our carbon emissions. Private enterprises like ours handle only 75-80 tons of everyday waste. Our growth can be a big support to civic bodies,” they say, adding that they also work in few villages where user fee is provided by the Gram Panchayats.

Shanmuga Priya.T

TYNGKAI:

BRIDGING THE GAP BETWEEN TRADITION AND INNOVATION IN MEGHALAYA'S HANDLOOM INDUSTRY

Vianney Basiewdor Nongrum, a young entrepreneur from Meghalaya, embarked on her journey of starting her own business while still studying in 2012. The inspiration behind her entrepreneurial spirit came from the opportunities she received to showcase her collection in fashion shows featuring her state textiles.

During this time, Vianney encountered a significant challenge - finding a reliable source of high-quality. "It was during my studies in 2012 I got an opportunity to display my collection in the fashion shows on my state textiles. But, unfortunately, at that time, I found it very difficult to get the source of 100% organic fabric," she says adding that it was not only difficult to locate such materials, but they were also quite expensive.

Additionally, the variety of silk available in the local stores was limited, usually limited to white or yellow colours. These limitations sparked Vianney's desire to address this issue and provide a solution.

After completing her studies in fashion design in 2013, Vianney took the initiative to conduct a thorough research. She was determined to discover potential sources for these fabrics and expand the available options for artisans and fashion designers like herself. This set the foundation for her entrepreneurial journey.

According to Vianney most of the denim used in Meghalaya are sourced from people in the southern states of India and Assam, particularly Muga. However, there is a raw material called aerosol that is available in Meghalaya and is only used for personal consumption. Furthermore, local artisans are limited in their dyeing techniques, using two or three basic colors: black, gray, and yellow. Red and maroon dyes are also used but are less common.

Vianney's desire to empower local artisans began in 2014 when she worked on a project with the Department of Agriculture in Meghalaya. She noticed that while the artisans were highly skilled, they lacked certain knowledge and techniques that could improve their craft. This led her to pursue a degree in textile design from NIC.

With TYNGKAI, Vianney hopes to provide a platform for local artisans to showcase their talents and reach customers outside of Meghalaya. She also plans to organise workshops and training sessions to teach artisans new techniques and help them improve their craftsmanship.

Vianney's journey led to discovery of natural and organic dyes. Experimenting



with various techniques and materials, she dedicated to perfecting the art of using natural her creations. Her commitment not only promoted eco-friendly practices but also added a unique touch to her products.

One notable aspect of TYNGKAI's collection is the "Jainsem," a traditional garment that sets Meghalaya apart. Unlike a saree, which is a single long piece, the Jainsem consists of two separate parts. Vianney takes pride in using the term "Jainsem" to honor the cultural significance of this distinct garment.

"The initial designs of Jainsem were characterised by simplicity, featuring a delicate pine motif. The pine tree holds great significance in Meghalaya, particularly in Shillong, where it flourishes abundantly. Building upon this connection to nature, I incorporated a plain stripe pattern along with the pine motif to create a visually appealing and elegant Jainsem, says Vianney.

Through TYNGKAI, Vianney aims to not only showcase the skills of local artisans but also to revive the traditional artistry of Meghalaya. By blending traditional techniques with contemporary designs, she has successfully created a unique and sought-after collection of handloom products that exemplify simplicity, elegance, and cultural pride.

Diving deeper into the rich cultural heritage of Meghalaya, Vianney embarked on a mission to explore the intricate designs and motifs worn by various sub-tribes in the region. What she discovered was a treasure trove of geometrical and floral patterns, each carrying its own unique story.

Inspired by the beauty and symbolism of these traditional patterns, Vianney made it her mission to revive and incorporate them into her designs. Through extensive research and surveys, she collected a remarkable range of patterns that had long been forgotten or overlooked.

"It was surprising to note that none of these patterns were being utilised or celebrated anymore. The traditional shawls commonly seen were adorned with simple stripes in yellow, red, white, and black," she says.

Motivated by her passion for preserving cultural heritage, Vianney set out to change that narrative. She began experimenting with different designs, starting with checks and gradually incorporating the mesmerising motifs she had discovered. With each creation, Vianney breathed new life into



forgotten patterns, infusing them with contemporary charm and grace.

The transformation from plain shawls to intricate creations represents the passion and dedication of Vianney. By blending traditional motifs with modern designs, she has successfully created a collection that not only honours the heritage of Meghalaya's textile industry but also captivates the hearts of those who appreciate the beauty and meaning behind each fabric.

Driven by a deep desire to revive the traditional motifs worn by the sub-tribes of Kim Hoi district in Meghalaya, Vianney embarked on a journey of cultural exploration. "I consulted the elderly members of the community, listened to their stories and delved into the meanings behind each motif," she says.

"With a mission to preserve and celebrate this rich heritage, I assembled a team of skilled weavers, along with those eager to learn the art of weaving. Together, we embarked on the task of converting these ancient motifs into contemporary designs," she adds.

The market response was overwhelming, which motivated Vianney and her team to further refine and improvise upon the patterns. They together dedicated themselves to bring new life into ancient motifs, infusing them with creativity and modern sensibilities. Each design became a testament to the fusion of tradition and innovation, striking a harmonious balance between the past and the present.

Recognising the challenges of affordability, Vianney initially focused its efforts on shawls and mufflers. Nevertheless, she encountered initial challenges in identifying the right market to target. However, she had her big breakthrough came when TYNGKAI showcased their Rindia collection at exhibitions. The response from outside buyers was overwhelmingly positive, affirming the beauty and quality of her work. This success was a testament to the fusion of tradition with innovation.

By leveraging Meghalaya's rich cultural heritage and combining it with modern aesthetics, Vianney has created a collection that is both timeless and contemporary.

"For young entrepreneurs who aspire to enter the world of entrepreneurship, particularly in the realm of preserving traditional art and culture, I would say: First and foremost, patience is



essential. The process of reviving and sustaining traditional art forms is a long and time-consuming endeavor. It requires commitment, perseverance, and a deep understanding of the cultural heritage being preserved. There will undoubtedly be challenges along the way, but embracing patience as a virtue will allow for steady progress and growth," says Vianney.

Vianney's story exemplifies the determination and passion of young entrepreneurs who strive to address existing gaps in the market. Her efforts to provide a diverse range of organic fabrics and promote local artisanal work have made her a role model for aspiring entrepreneurs in Meghalaya and beyond.

Through TYNGKAI, she continues to inspire others to pursue their dreams and create innovative solutions that drive positive change in their communities.

Bhavadharani K



"Embracing a culture of scientific inquiry and responsibility is essential for enhancing disaster resilience."

Prof. Chandan Ghosh shares with Marie Banu the significance of using Vetiver grass in disaster management

Prof. Chandan Ghosh is a seasoned professional with a diverse background spanning academia, research, and practical experience in civil engineering and disaster management.

With his Civil and Infrastructure Engineering background and having more than 20 yrs of professional services, teaching, research and various decision-making issues, Dr Ghosh joined NIDM as full professor in July 2006. He has been looking after various training, research, documentation and Disaster Management policy advocacy of India.

As professor & Head, Prof. Ghosh has made important contributions in strengthening training curriculum with field exposure and professional credence in the disaster database/documentation in the institute. He has been serving as expert member in various committees formed by DDA, MCD, NDMA, UPSC, DST, MoUD, MoES, to name a few.

Currently, Chandan holds the prestigious position of Director of Research & Innovation and CEO of Nishkam Technologies, a startup based in IIT Kanpur.

In an exclusive interview, Prof. Chandan Ghosh shares with Marie Banu the significance using Vetiver grass, in disaster management.

Your background in disaster management and how you apply that expertise in your current role at NIDM?

My background in Civil Engineering and expertise in disaster management have been invaluable while serving NIDM for about 17.5 years till December 2023, where I continue to leverage mathematical models, simulation tools, and interdisciplinary approaches to develop effective mitigation strategies for a wide range of natural and man-made disasters.

My experience in disaster management took a more hands-on approach when I joined Earthquake Risk Evaluation Center (EREC) as an advisor in 2005, a role that allowed me to apply my expertise in mitigating seismic risks. Eventually, I transitioned to the National Institute of Disaster Management (NIDM) in 2006, where I served as a professor and later as the head until December 2023.

In my tenure at NIDM, my focus has been on mitigation strategies. While traditional disaster management involves responding to crises and aiding in rescue operations, my team and I are more inclined towards identifying the root causes of disasters and implementing measures to prevent or minimise their impact in the future. This involves a combination of research, innovation, and simulation techniques to understand and quantify various risk factors, from urban heat islands to air pollution levels, infrastructure auditing, post disaster site visits and documentation and their health implications, etc.

Can you discuss the challenges and how you promoted disaster-resilient constructions in India?

Certainly. One of the primary challenges I encounter is the mindset of people. Despite having comprehensive Indian standard codes developed by the Bureau of Indian Standards, implementing disaster-resilient infrastructure, particularly in earthquake-prone areas, remains a challenge. Approximately 60% of India's landmass is vulnerable to earthquakes, including regions like the Himalayas, Gujarat's Kachchh area, the

Andaman and Nicobar Islands, and the entire north-eastern region.

While we have evolved our codes and practices over the years, incorporating advancements in materials and technology, the challenge lies in fostering a culture of adherence to these standards. With the increasing complexity and height of buildings, there's a constant need for innovation in structural engineering to ensure resilience. While we give usually more attentions to overground structure design & construction, the ignorance of the ground behaviours magnifies the vulnerability.

At NIDM, I focused extensively on training engineers, architects, and town planners, emphasising the importance of upgrading construction practices and learning from global examples, notably Japan. Japan's systematic approach to upgrading engineering practices and infrastructure over centuries serves as a benchmark for disaster resilience.

I often conducted training programs where I highlighted Japan's experiences with earthquakes, showcasing how they have continually improved their construction techniques and curriculum. By analysing historical earthquake events and their impact on structures, we devised experiments to recreate seismic forces on buildings, demonstrating the importance of adhering to codes and standards derived from such experiences.

My approach involved making technical details accessible to a broader audience, using practical tools and examples to underscore the significance of following established codes. Ultimately, the challenge lies in fostering a culture of proactive disaster resilience among all stakeholders involved in construction and urban planning.

Tells us about importance of raising awareness and demonstrating retrofitting measures for disaster-resilient infrastructure, particularly focusing on earthquake preparedness.

Absolutely. Raising awareness and demonstrating retrofitting measures for disaster-resilient infrastructure are crucial aspects of disaster management, particularly in earthquake-prone regions. My role has become vital in not only educating people but also visiting sites to identify faults and neglected areas in infrastructure. Retrofitting, or upgrading existing structures to meet current safety standards, is an essential component of this effort.

During site visits, I often come across construction projects where fundamental safety measures are overlooked. Despite my passionate advocacy and extensive experience, there is still resistance to implementing necessary changes. This resistance is concerning, considering that earthquake preparedness is not solely about early warning systems. While early warnings provide crucial seconds for response, it is equally important to ensure that buildings and infrastructure can withstand seismic forces.

One of the challenges lies in conveying the importance of structural resilience to stakeholders, including contractors and architects. I frequently conduct voluntary site assessments, emphasising the need for civil engineers to be actively involved in construction projects. However, there remains a gap between established engineering principles and their application in practice. This discrepancy highlights the need for continued advocacy and education within the industry.



In addition to structural considerations, non-structural elements play a significant role in disaster resilience. Simple measures, such as securing glassware in chemistry labs or reinforcing glass windows, can mitigate secondary hazards during earthquakes. I have incorporated these non-structural mitigation strategies into school safety programs, recognising the importance of safeguarding our future generations.

While early warning systems provide valuable information, their effectiveness relies on swift and decisive action. Japan's example of rapidly detecting earthquakes and disseminating information to the public is commendable. However, in India, there is a lack of urgency and coordination in implementing similar systems. Despite advancements in technology, our ability to respond effectively to earthquakes remains limited.

What is the significance of bioengineering, particularly using Vetiver grass, in disaster management?

Bioengineering, especially leveraging Vetiver grass, presents a sustainable solution for mitigating the impact of disasters, particularly in hilly areas prone to erosion and landslides. Traditional engineering approaches, such as RCC structures and dams, have limitations, especially in environmentally sensitive regions like hilly areas. Nature-based solutions like Vetiver grass offer a more holistic and resilient approach to disaster management.

Vetiver grass has remarkable properties that enable it to withstand extreme temperatures (-15 to +55 degrees Celsius) and effectively control erosion. Its extensive root system helps stabilise slopes, preventing landslides and soil erosion even in challenging terrain. By incorporating Vetiver grass into infrastructure projects, we can minimise the environmental impact of traditional engineering methods, such as concrete or brick covers. Vetiver grass naturally protects slopes, reduces soil erosion, and helps restore ecosystems, promoting sustainable development in disaster-prone areas.

It also offers a cost-effective, sustainable, and long-lasting solution compared to traditional methods. Once planted, Vetiver grass requires minimal maintenance and can endure various environmental conditions, making it a reliable choice for disaster management and environmental conservation.