Link to the Various Student led society of MAHE: MAHE Student Society

Student clubs at Manipal Academy of Higher Education (MAHE) dedicated to environmental issues, conservation, and climate change are instrumental in raising awareness and driving action towards protecting the environment and promoting sustainability across all sustainable goals. These clubs offer a diverse range of activities, including organizing awareness campaigns, hosting workshops and seminars, and participating in clean-up initiatives. Collaborating with local environmental organizations, they champion critical causes such as hunger alleviation, healthcare improvement, gender equality, education enhancement, clean energy access, and sustainable partnerships.

Participation in these initiatives provides students with a deeper understanding of environmental conservation's significance and equips them with practical solutions for sustainability challenges. Furthermore, these clubs serve as platforms for students to connect with like-minded peers, fostering a sense of community and facilitating personal and professional growth. Through knowledge exchange and collaborative efforts, members can positively impact campus life and the broader community.

Moreover, environmental-focused student clubs often collaborate with academic departments, research centres, and external organizations to support ongoing sustainability endeavours. These collaborations offer students valuable learning opportunities, exposing them to real-world challenges and solutions.

In essence, MAHE's student clubs offer a robust platform for students to actively engage in addressing environmental issues and promoting sustainable practices. Beyond academic pursuits, these clubs cultivate essential skills, knowledge, and a sense of environmental responsibility that extend beyond graduation.

Link1: Donation Drives - KMC STUDENT COUNCIL (corekmc.com)

Link 2: Rotaract Club of Manipal - MIT, Manipal Academy of Higher Education

Link 3: https://www.manipal.edu/mit/mit-experience/student-welfare/non-technical-clubs.html

Ecospire

Petrichor is a periodical publication issued by Ecospire, a climate change club affiliated with Department of Liberal Arts, Humanities and Social Sciences (DLHS_. The publication features articles and poetry that explore various dimensions of climate change, with the aim of stimulating dialogue among the students and staff of MAHE. Petrichor is a potent tool for cultivating awareness and understanding of the complex and multifaceted issue of climate change and provides a platform for informed discussion and analysis. The publication is an invaluable resource for individuals seeking to stay abreast of the latest developments in climate science and policy and is a testament to the intellectual rigour and commitment to sustainability that characterizes the Ecospire community.

Manipal Environment Conservation Society (MECS) Students Club

The MECS Club has been actively engaged in the Sustainability Campus Initiative and is the recipient of the 'Best Sustainability Action Project' and 'Best Sustainability Green Campus Audit' from Environmental Agency Abu Dhabi. The students have been conducting awareness campaigns such as e-waste recycling and plants at the university and in schools to spread awareness and recycling e-waste in collaboration with Trading Peaks to save landfill. The club has conducted campaigns on food waste, no plastic to educate the community and create an impact. MAHE MECS Club has been actively involved in participation for COP28 as a University Climate Network member. The Universities Climate Network (UCN) comprises of 33 UAE-based universities and higher education institutions working together to drive engagement among youth and academia in the lead up to COP28.

Links: MAHE Conservation Society (@mecs_dubai) • Instagram photos and videos

Universities Climate Network (UCN) - COP28 UAE

Link : Facebook

Sustainable Campus Initiative

Sustainable Campus Initiative (SCI) is a youth initiative organised by Environment Agency Abu Dhabi that mobilises the enthusiasm and energy of youth to make change within themselves, their university campus and their community. Youth discuss and work on current environmental imperatives

such as climate change, and the depletion of natural resources, in addition to the economic, social and cultural dilemma that seem to be the hallmark of our globalised world. SCI is designed to provide a road map for youth in the higher education institutions to tackle this uncertain future. Manipal Environment Conservation Students Club has been actively participating every year in the SCI Initiative for sustainable impact in-campus and beyond campus.

- Green Campus Audit
- UNFCC Race to Zero - Climate Action Plan
- Recycle & Plant - Ewaste campaign at campus
- Seeding Sustainability Program with Water Alliance & Herman Miller
- Recycle & Plant – Ewaste campaign in schools

As a signatory for 'UNFCC Race to Zero', MAHE has launched 'Climate Action' aligned with UAE Net Zero 2050 goals. The students' team, led by the faculty, is working in collaboration with the facilities team for the decarbonization of the campus through research and innovation. One of the types of research is focused on building management in collaboration with an industry partner for creating a real-time platform development for the Internet of Things (IOT) and AI-based Energy monitoring of the campus. This is a two- phase project that involves energy monitoring through power tags and IoT based systems with the data recorded on Cloud while Phase II is data analysis and development of controlling units based on AI-based protocols.

MAHE students of MECS students club conducted the 'Seeding Sustainability' Program in collaboration with Water Alliance at the 18th United Nations Climate Change Conference of Youth (COY18) at Expo City Dubai. The 18th Conference of Youth with official youth constituency of UNFCC, Yongo, fostered inclusivity and diversity, and empowered young voices to shape international climate policies, fostering universal accessibility. The MECS Students Club students volunteered to impact 780 students across 3 schools for Grades 3-5 students through gamification addressing SDG 12, SDG 13 & SDG14. Water Alliance is a non-governmental organization that educates children and adults to become mindful of their water footprint.

Link: Facebook

Additionally, MECS Club has been engaging experts from industry for

seminars, workshops, interactive talks with students, dialogues on climate challenges, debates and competitions addressing climate change, research and innovation in areas such as retrofitting for the sustainable built environment, Green finance, advanced technologies for sustainability, Environment, Social Governance, Policy making, alternative energy sources, green hydrogen, Gender and Climate, Nature based solutions.

Link : Facebook

MAHE has set up laboratories with cutting-edge technologies to address sustainable solutions. MAHE has launched a global competition to invite solutions on renewable energy in collaboration with CEV Canada, and encourage climate accelerator programs and incubators to implement towards climate action.

The Chartered Institute of Building Services Engineers (CIBSE) awarded Manipal Academy of Higher Education Dubai at UAE Awards 2023 for initiatives done by MECS Students Club

- Sustainability Initiative of the Year: Manipal Environment Conservation Students Club for their 'Seeding Sustainability' program'. The student team comprises Affan Ahamed, Arya Shenil, Ardra Sathyan, Syed Adhil, Iman Farooq, Shruthi Rajnikanth, Arifa Salwa, Jenifer Dsouza, Saraswathi Gokulakrishnan, Anna Mary Shaju, and Raashna Reema. The team was mentored by Dr. Bhakti More, Dr. Ravishankar Dudhe

- Digital Innovation of the Year: MAHE Dubai's team, led by Dr. Ravishankar Dudhe, won Digital Innovation of the Year Award with the NetZero-oriented IoT and AI- Based Energy Monitoring System with students members of MECS Club, Syed Hayyan and Mohammad Faruque

- Student Design Competition: In a theme aligned with COP28, MAHE Dubai's interdisciplinary team clinched the title for 'Villa Retrofitting' project, bagging AED 5,000 and a spot on the CIBSE webpage/journal. The students were Biju Sara Binu, Murassa Khanam, Fathima Kunhabdulla, and Eldo Mathew, guided by Dr. Ravishankar Dudhe and Dr. Bhakti More.

Link: Facebook


MANIPAL
MAHE Dubai wins accolades
at the Sustainable Campus Initiative
organized by Environment Agency Abu Dhabi


MANIPAL
1994
2000
'Sustainability Initiative of the Year' Award: Awarded for the sustainability initiatives by Manipal Environment Conservation (MECS) Students Club


MANIPAL
5th
ANNUAL
CIBSE
U.A.E
'Digital Initiative of the Year' Award : Awarded for the student project on NetZero oriented IoT (Cloud) and AI Based Energy Monitoring and Controlling System, installed on campus


Trading Peaks
RECYCLE & PLANT
MANIPAL
#ExperienceExcellence
ADMISSIONS OPEN

Edition #1

March 2024

ECOSPIRE

PRESENTS

PETRICHOR

The Newsletter

Designed and Edited by: Sreya Suresh
B.A English IV SEM)



UNVEILING THE URGENCY, INSPIRING ACTION

In today's world, when environmental issues and climate change are at the forefront of global concerns, a newsletter focused on these themes is more relevant and necessary than ever. This type of newsletter may be used to educate, inform, and encourage its readers to take action. It can emphasise the most recent advances in environmental research, legislation, and activism, as well as providing practical recommendations for living sustainably. Furthermore, words have the ability to effect change by increasing awareness, altering public opinion, and lobbying for policy improvements. A well-crafted newsletter may be a catalyst for good environmental change, making it a crucial weapon in the battle against climate change. This was at the forefront of the conception of Petrichor, the newsletter for our climate club Ecospire. May it help provoke some thoughts and actions we desperately need.

WHY ECOSPIRE NEEDED TO HAPPEN

DR. SWATHI, ASSISTANT PROFESSOR AT DLHS

FACULTY IN-CHARGE FOR ECOSPIRE

I am thrilled to see this newsletter take shape and be out there in the world, articulating how students are thinking about the environment and more importantly, their place in these discourses. The range of topics on which students have voiced their thoughts—from consumption practices to the influence of social media on our buying choices to the intersections between social and environmental justice to delving into how literature engages with climate change—shows the steps students are taking to make the environment and its discourses their own. As an educator, I could not be gladder that the newsletter represents a step ahead.

Environmental studies is often treated as 'one more subject to study', as something made 'compulsory' by rules and regulations but at the end of the day, not a 'core' subject for students who will go onto have glittering careers in their subject areas—whether it's media, psychology, literature or the social sciences. This is the conundrum for us: all of us know about and certainly experience the environmental crisis but it is not central to our hopes, desires and plans for our individual lives. The scale at which environmental crisis takes place also confounds us, making it something someone else—maybe some corporation, some summit, some government—will address. As Divya Kishore writes in her piece in this newsletter, "We don't think we need to save the environment because we think someone else will do it."

This is where environmental humanities can step in to help change this narrative of helplessness and un-accountability towards just action. The articles featured in this newsletter on eco-fiction and eco-criticism for instance showcases how writers from across the world are alive to the looming crisis and are doing their bit to centre the environment in people's imaginations. In a similar vein, the articles on climate change and mental health can open up the possibilities for incorporating climate injustice into mental health practices. These approaches can ensure that the environment is not something out there to think about but are central to our lives. For me, this newsletter is only the beginning of something like a collective action, spearheaded by students of MAHE, inspiring change both within and outside the university. My best wishes to the Ecospire team, and the newsletter's editor Sreya Suresh, for beginning this journey for all of us.

SOLAR POWER, LIKE THE LORDE ALBUM?



DIVYA KISHORE

B.A ENGLISH (HONS) II SEM

It is easy to admit that the climate isn't the first thing we think of when we roll out of bed in the morning. When we are barreling through the day on five hours of sleep, we do not really care if the cup is made of plastic or paper as long as there is enough caffeine in it. I can't blame you for thinking you're being environmentally conscious enough because you do not use plastic bags or litter. While it definitely contributes to our planet's well being, they aren't exactly (environmentally) green flags (yes, pun intended) because taking the extra effort to chuck your coffee cup in the bin is the bare minimum. After hearing the same preach year after year, it gets tiring. We automatically trivialize the gravity of the situation if we don't know how we can directly relate to it. Considering the immense contribution of corporate firms to the damage of our environment, it's easy to think that as teenagers, there is not much we can do to help, apart from going on rallies with posters made out of recycled paper. However, this leads to diffusion of individual responsibility. We don't hold ourselves accountable. We don't think we need to save the environment because we think someone else will do it.

I think a good way to make the concept of climate change accessible is understand how the nuances of the matter can be connected to the spheres of life we interact with on a daily basis. It is difficult to realize how every aspect of our routine's landscape can be weaved into a domino sequence of events that impacts our environment.

For example, certain stores we shop from online rely on unsustainable methods to run the machine of fast fashion. Plastic toys and bottles which are thrown take longer time to biodegrade than our favourite fanfiction authors take to update a chapter.

While I of all people understand how a stack of pretty books is a pillar of emotional support, switching to e-books and online textbooks can reduce paper wastage (it's also easy on your wallet and storage space)

I know we cannot change every aspect of our lives to suit the needs of the environment. We aren't asking you to come to university wearing potato sacks and spend your nights scouring websites to download books for free. However, being conscious of your actions and decisions is important as even the smallest contributions can improve the fabric of our routine before it's too late.



CAPITALISM, CLIMATE AND INSTAGRAM. ALL THE FUN STUFF

VASUNDARA SRINIVASAN

B.A ENGLISH (HONS) IV SEM

Capitalism. Isn't it outstanding? The global economic framework that values only capital. And it made us a lot of promises. Abundance of work, unlimited growth, wealth, power, and happiness for everyone.

Unfortunately, things did not pan out that way.

Firstly, let's understand capitalism. It is defined as "an economic and political system in which private owners control trade and industry in a country for profit." Simply put, the drive for profit is the fundamental aspect of capitalism. Irrespective of the price. Even when they were people's lives.



Now, let's talk about social media, particularly Instagram. If only there were a few words that sum up Instagram. The app, which has over 2.3 billion active users and produces over 95 million photos and videos daily, has done exactly what marginalized people fear most: it has exacerbated our culture of wasteful lifestyles. When we see an Instagram influencer using a new shiny toothbrush, what do we do? We also want it. Do we need it? That is unimportant. All we want is that shiny toothbrush. The fact that the shiny toothbrush is probably not any more useful than a regular one we already have doesn't matter. The mindless use of social media is the root cause of the overconsumption habits. We are aware that social media has both positive and negative effects on us. While it can help us network with the right people, it can also put our wallets in jeopardy by causing us to spend money on things we may not need or even detest. Yet, we almost always choose to do the worst for ourselves.

How does capitalism and social media play a role with climate? Just one phrase: Instagram made me buy it.

How many times have we either said or at least thought that when we purchase something we don't need? The minute that something we bought (to keep up with the ever-changing personality of social media) loses its social value, we discard it. Even though it may be hidden from our view, the rubbish we carelessly throw away could wind up in a child's stomach as food.

Food waste, E-waste, medical wastes are all hard to get rid of. It ends up in our oceans which propels into a cycle of destroyed marine life, destroyed fishing industry and eventually our food chain. Overconsumption leads to waste which leads to inability to get rid of the waste which leads to endangering the planet that feeds all of us.

Let's care more and care right.

CLIMATE CHANGE AND MENTAL HEALTH: AN OVERVIEW

JAHNAVI V NAIR

B.A PSYCHOLOGY (HONS) IV SEM

Environmental justice and natural health are two interconnected concepts that have important implications for the mental health and well-being of marginalized populations. Clinical psychology, with its focus on the diagnosis and treatment of mental health disorders, has a unique perspective on these issues, particularly when it comes to indigenous and marginalized populations. Environmental justice refers to the fair distribution of environmental burdens and benefits across different groups of people. This includes access to clean air and water, green spaces, and protection from toxic pollutants.

However, marginalized populations often bear a disproportionate burden of environmental hazards, which can have negative impacts on their mental health. For example, exposure to air pollution has been linked to increased rates of anxiety and depression, while lack of access to green spaces can contribute to higher levels of stress and anxiety. Natural health, on the other hand, refers to the benefits that are derived from exposure to natural environments. This includes improved physical health outcomes such as reduced rates of obesity and chronic diseases, as well as mental health benefits such as decreased levels of stress and anxiety.

However, marginalized populations often have limited access to natural environments, which can contribute to health disparities. When it comes to clinical psychology, the impacts of environmental injustice and natural health disparities on mental health outcomes are of particular concern. For example, studies have found that exposure to environmental toxins such as lead and mercury can lead to cognitive and behavioral impairments, while lack of access to green spaces has been linked to increased rates of depression and anxiety.

For indigenous and marginalized populations, the impacts of environmental injustice and natural health disparities are often compounded by other social determinants of health such as poverty, discrimination, and lack of access to healthcare. This makes it crucial for clinical psychologists to take a culturally sensitive approach when working with these populations.

This includes recognizing and respecting the unique cultural beliefs and practices of indigenous populations, as well as understanding the historical and ongoing trauma and injustices that they have experienced. It is crucial for clinical psychologists to take a culturally sensitive approach when working with these populations, and to advocate for policy changes that promote environmental justice and natural health for all.

HOW ARE THE INDIGENOUS AND MARGINALIZED POPULATIONS AFFECTED?

SREESHTI ROY

B.A PSYCHOLOGY (HONS) IV SEM

According to the UN, economic hardships and climate change are having a severe influence on the indigenous tribes' traditional methods of procuring food. Due to their efficacy, reduction of waste, and ability to adjust to the seasons, these food systems are regarded as some of the most sustainable in the world. However, among indigenous groups, climate change is contributing to issues like drought and the extinction of species.

In Africa, indigenous women are paying the price of climate change. The Sahel is a large semi-arid region south of the Sahara Desert, which is where Lake Chad is located. The region is extremely susceptible to drought, and in the last few decades, the size of the lake has changed considerably during prolonged periods of drought. Over the past 50 years, it has fallen to roughly a tenth of its former size, which was over 10,000 km². More than 30 million people rely on freshwater from Lake Chad. It also supports fishing, irrigation, and economic activity both in Chad and Cameroon, Nigeria and Niger. But as the lake shrinks communities are struggling and there is competition for the dwindling resource. Because of this, in some communities, men must seek work in bigger cities during dry seasons when the lake can no longer sustain them. Internal migration is increasing, as well as people looking further afield to places such as Europe for work. This leaves the women and children left behind to fill the gaps and they are forced to improvise to maintain food security.

This is not a problem exclusive only to Africa, gender inequality coupled with the climate crisis is one of the greatest challenges of our time. It poses threats to ways of life, livelihoods, health, safety and security for women and girls around the world. Girls leave school to aid their mothers in the agriculture sector.

Due to long-standing gender disadvantages that have led to differences in information accessibility, decision-making, access to resources, and training, women are less likely to escape disasters and more likely to suffer injuries. Women and girls are less likely to be able to get aid after a disaster, as the more physically capable men are given an upper hand, endangering the women's ability to survive and rehabilitate. This also leaves them susceptible to future adversities. This also relates to the fact that the degree of mental distress is also high among women and people in general in developing countries

Although natural disasters are due to the unstoppable forces of nature, controlling climate change will lessen the magnitude and the unpredictability that has been seen when it comes to natural disasters like tsunamis, cyclones, etc. which will lessen the number of people that experience these calamities and develop psychological disorders from them. .



ECO-FICTION

VIBHA VENUGOPALAN REKHA
B.A ENGLISH (HONS) IV SEM

Eco-fiction, commonly referred to as environmental fiction, is a subgenre of literature that focuses on how people interact with the natural world. Environmental fiction analyses the effects of environmental deterioration and climate change and is concerned with how human activity affects the environment.

The early 20th century saw the beginning of environmental fiction as authors started to investigate the interaction between humans and nature in their writing. The environmental movement began to pick up steam in the 1960s and 1970s, although the genre did not become well known until then. The 1962 release of Rachel Carson's Silent Spring, which increased public awareness of the risks posed by pesticides, was a key moment in the evolution of environmental fiction.

The emphasis on the environment and the effects of human action on the natural world are characteristics of environmental fiction.

Authors of environmental fiction use their writing to investigate the effects of human activity on the environment and to spread awareness of the risks posed by environmental deterioration and climate change. They also look at how science, technology, and capitalism contribute to environmental damage, and they frequently look at how people interact with other animals.

The focus on human culture is another trait of environmental fiction. The social, economic, and political elements that lead to environmental deterioration, including the roles of businesses, governments, and individuals, are examined by authors of environmental fiction. The effects of environmental deterioration on human health and wellbeing as well as the moral and ethical ramifications of human behaviour on the environment are also discussed.

It has, however, also come under fire for highlighting the harmful effects of human activities and for its capacity to instill a sense of dread and despair. It has drawn criticism for being overly bleak and for failing to address the issue of environmental destruction.

Cli-fi, commonly referred to as climate fiction, is a relatively contemporary literary subgenre that has grown in popularity in recent years. Science fiction with a climate change theme focuses on how climate change may affect the environment and human society. It attempts to increase people's knowledge of the risks posed by climate change and motivate them to take action to lessen its consequences. Cli-fi is closely related to environmental fiction, both of these genres work together to usually form dystopian fiction.

The future or a planet that has undergone significant change as a result of climate change are frequent settings for climate fiction. The stories examine a range of situations, from severe natural disasters to the environment's gradual decline. Authors of climate fiction use their writing to spread the word about the dangers of climate change and to motivate readers to take action to lessen its consequences. A worldwide series of protests called the People's Climate March were held on September 21, 2014, in various locations all around the world. Before the United Nations Climate Summit in New York City, a coalition of environmental and social justice organisations organised the marches to demand action on climate change.

The demands by the People's March included a full transition to renewable energy, Climate finance and green economic with economic justice.

A worldwide series of protests called the People's Climate March were held on September 2014, in various locations all around the world. Before the United Nations Climate Summit in New York City, a coalition of environmental and social justice organisations organised the marches to demand action. The demands by the People's March included a full transition to renewable energy, Climate finance and green economy with economic justice.

Margaret Atwood's "MaddAddam" trilogy, which envisions a dystopian future in which global warming has wreaked havoc on the world, served as inspiration for the People's Climate March.

The "MaddAddam" trilogy, which consists of the books "Oryx and Crake," "The Year of the Flood," and "MaddAddam," envisions a dystopian future in which climate change has wreaked havoc on the globe and humanity is fighting for survival. The trilogy examines issues of genetic engineering, corporate greed, and environmental destruction. It has received accolades for its foresight into the perils of corporate dominance and climate change.

The concepts and sentiments of the "MaddAddam" trilogy served as an inspiration for the People's Climate March. The march aims to advocate environmental justice for groups that are disproportionately affected by climate change and bring attention to the urgent need for action on the issue, just as the novels portray a world where climate change has caused widespread destruction and inequality. The novels emphasise the need for grassroots movements to oppose powerful interests and demand change, as well as the perils of corporate control. This message struck a chord with the People's Climate March organisers, who viewed the march as a chance to confront corporate power and call for a more just and sustainable future. The "MaddAddam" trilogy also served as inspiration for the People's Climate March's innovative storytelling and artistic elements. Giant puppets, costumes and banners were among the imaginative and artistic displays used throughout the march to emphasise the urgency and significance of the message.

Essentially, interconnecting facts and science with the humanitarian aspect of story telling, which is personal, enthralling and has prolonged effect is one of the best ways to spread awareness as well as encouraging action. The art of climate fiction or environmental fiction are slowly seeping into other genres too, creating a natural yet inviting thought of climate change for the readers and for people to realise the day-to-day relevance of the topic in their lives.

Climate Fiction To Start Reading

- American War. by Omar El Akkad
- War Girls. by Tochi Onyebuchi
- Gold Fame Citrus. by Claire Vaye Watkins
- Vigil Harbor. by Julia Glass
- Weather. by Jenny Offill
- Oryx and Crake. by Margaret Atwood
- Perilous Times. by Thomas D. Lee
- Bangkok Wakes to Rain. by Pitchaya Sudbanthad

ECOCRITICISM: ARE HIS WORDS WORTH?



DEEPIKA G.

B.A ENGLISH (HONS) IV SEM

Ecocriticism is a literary and cultural studies interdisciplinary subject that originated in the late twentieth century, focused on the relationship between literature, culture, and the environment. This critical perspective investigates how texts, such as literature, film, and other forms of cultural expression, relate with and reflect nature, ecosystems, and environmental challenges. It aims to investigate how human society interacts with the natural world and how these relationships are portrayed in cultural artefacts.

Ecocriticism focuses on environmental ethics and the critical need for ecological awareness and action. It recognizes the interdependence of human and non-human natures and invites a rethinking of the human-nature relationship. Scholars in this discipline frequently examine literature to identify underlying environmental ideologies, criticizing anthropocentrism and advocating for a more eco-centric viewpoint.

The analysis of how literature and culture both reflect and impact attitudes towards the environment is one of the fundamental topics of ecocriticism. Eco-critics seek to create a better knowledge of the world's ecological difficulties and to inspire positive change by analyzing depictions of nature and environmental issues in various media. Ecocriticism, in this sense, not only increases our understanding of literature and culture, but also plays an important role in encouraging ecological awareness and environmental stewardship

Wordsworth as an eco-critic poet

Wordsworth was an 18th century Romantic poet. He is considered an eco-critic poet and is often considered to be one of the first climate change activist. A large amount of his poems have nature as a predominant theme. He is also known as a nature poet.

The debates over William Wordsworth's reputation as a poet of Nature, as well as his ecological and environmental concerns, are numerous. McKusick highlights Wordsworth's crucial role in the establishment of English Romanticism as well as his substantial influence on the modern environmental movement. Wordsworth's retreat to the tranquil Lake District, away from the hectic technological civilization of the Enlightenment, established him as a "ecological critic of the Enlightenment." R. Pite emphasises that Wordsworth's strong connection to nature was inextricably linked to specific places that have significant personal significance for him.

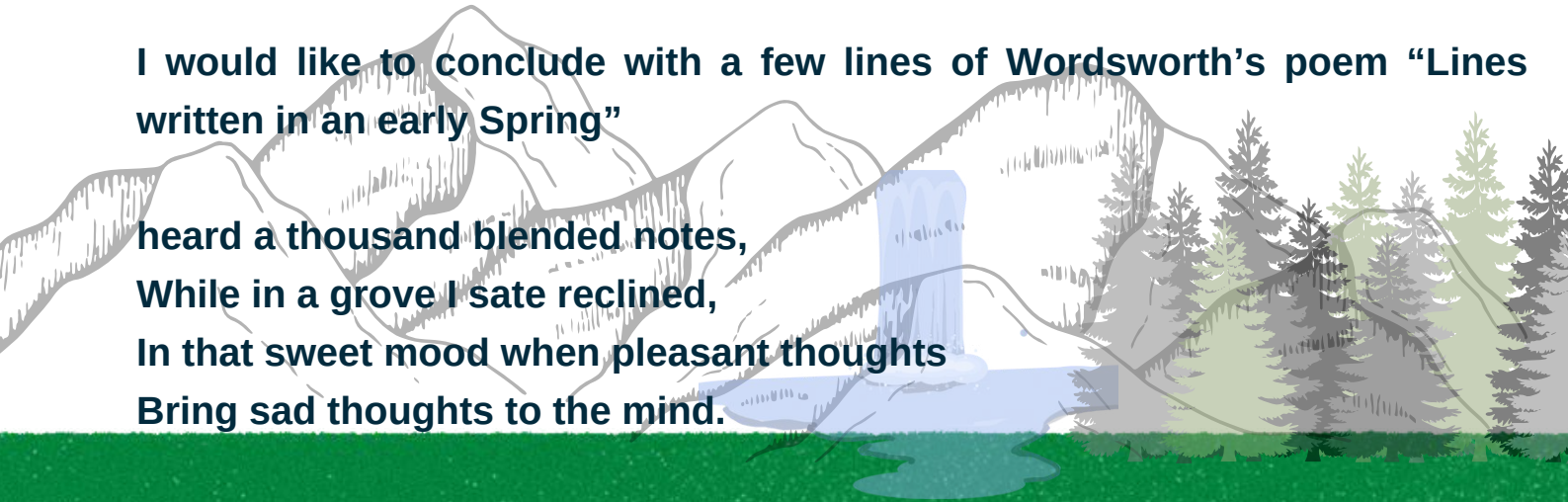


Wordsworth's interest in the non-human world, particularly Nature, according to Bate in "Romantic Ecology," is a quest for a harmonious relationship with it. Wordsworth, he sees, is a conservative thinker who advocates for Nature yet is frequently regarded as mute.

Is *his ecocriticism relevant in the 21st century?*

Wordsworth is a popular writer and his legacy as a romantic and nature poet lives on even today. With the rise of ecocriticism and climate change, his ecocriticism is questioned. Romantic poets emphasised on returning to nature and leaving the big cities. However, can literature written in the 18th century have relevance in the 21st century and the climate crisis we face today?

Surely, his writings cannot express the struggles of the 21st century and our battle with the climate crisis. Nevertheless, his poems like "Tintern Abbey" can be used to remind people about the importance of nature. Literature has always been used as a tool to inspire and motivate society. In the face of the climate crisis, we can use the poems of Wordsworth and other eco-critic poets to re-establish the bond between humanity and nature.



I would like to conclude with a few lines of Wordsworth's poem "Lines written in an early Spring"

heard a thousand blended notes,
While in a grove I sate reclined,
In that sweet mood when pleasant thoughts
Bring sad thoughts to the mind.

To her fair works did Nature link
The human soul that through me ran;
And much it grieved my heart to think
What man has made of man.
…
If this belief from heaven be sent,
If such be Nature's holy plan,
Have I not reason to lament
What man has made of man? (Wordsworth, 2006, p. 1333, lines 1-8, 21-24)

WILD-FIRES, GLITTER, GENDER NORMS AND CLIMATE CHANGE

SREYA SURESH

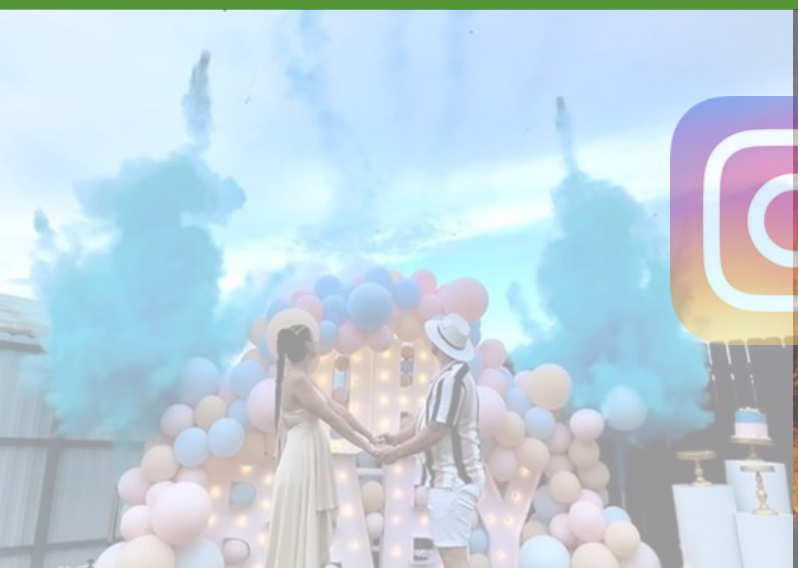
B.A ENGLISH (HONS) IV SEM

Wildfires, glitter, gender norms and climate change. Four words that you may not often find hanging out together in a sentence. Although after the events of the past few years, it is not surprising that they do. If you have been on social media at any time during the last few years you might know about this new “tradition” or celebration that has gone viral and attacked our feeds. Gender Reveal Parties. Gender Reveal Parties are parties organised for the “grand reveal” of the sex of the baby of an expectant couple. It is done in numerous creative ways, ranging from the more mellow cake-cutting to reveal blue or pink icing on the inside to the more elaborate balloon bursting or helicopter stunts involving colour powders. So what does this have to do with the environment and climate change?

A lot of these gender reveal parties go horribly wrong, (inspiring a new genre of social media news coverage, often titled ‘Gender Reveal Gone Wrong) causing damage and destruction.

In certain instances, these damages aren’t limited to their backyard. The Sawmill Fire in Arizona began in 2017 after an off-duty border patrol agent shot at an explosive target during a gender reveal. The resultant wildfire, helped by dry and windy weather, burnt around 28% of the Las Cienegas National Conservation Area. The fire took almost 800 firemen and more than $8 million to put out. Three years later, a smoke bomb during a gender reveal party started California's El Dorado Fire, which burnt more than 22,000 acres in San Bernardino County and killed one fireman.

Many reports suggest that the damage caused by these wildfires, especially the El Dorado wildfire, is hard to recover from during our lifetimes. Experts say that even if they were to recover, trees that were burned were burned and that nothing can undo that or the toxic fumes that went up in the air. Not to mention all the wildlife that is displaced or killed during these wildfires. Fish are also very vulnerable to wildfires, maybe much more so because they cannot fly, escape, or flee, said to Hunter.





A fire may heat up a body of water, killing aquatic creatures. Following a fire, ash flow and erosion can also make it hard for fish to breathe, resulting in large die-offs, as was the case after Australia's devastating 2020 wildfires.

Even if these events do not cause severe wildfires, pyrotechnics, smoke bombs, and sparklers are unquestionably bad for the environment due to their proclivity to emit heavy metals and toxins into the sky. Glitter, which is sometimes used at parties in pink or blue bursts, has been dubbed a "environmental abomination" due to its status as a microplastic — tiny fragments of trash that are hard to dispose and are everywhere from oceans, our food , rainwater and have been found in the placentas of unborn babies. Glitter is tiny and sticky and almost impossible to dispose of properly. Glitter is one of the most popular item used in gender reveal parties.

Moreover, gender reveal parties contribute to the promotion of harmful stereotypes about gender and gender roles. It emphasizes that the gender of a baby is its most important aspect that deserves the most celebration (or disappointment as seen by the countless number of videos that show dads being disappointed at having a baby girl). In our modern age where gender discourses have moved past the traditional binary, a gender reveal party is best left behind. In India, this trend is not prevalent as its illegal to reveal the sex of the baby before birth.

It is important to note that the damages that we inflict upon our environment for a few minutes of social media clout and moments of enjoyment, can go a long way, and not in a good way. This can include not just gender reveal parties but celebrations such as wedding and birthday parties as well. This is not to say that celebrations shouldn’t happen at all. The first step to take would be to stop the usage of glitter.

FROM ALL THE BEES, WHO DIED SILENTLY

ART AND POEM BY:
ARYA ATUL GOHAD
(SRISHTI STUDENT)



They said don't come close to me,
I wouldn't take it too kindly.

Yet you paid no heed,
Waving, pointing, and prodding.

Now, they say I must be killed,
Not knowing that I am already dying.

You think I stung you out of malice,
But I didn't know my being would cost my life.

As my stinger pierced into your flesh,
It ruptured my body too, this was nobody's first choice.

As I spiral to the ground, I pray for you,
If you're ever in the wrong place, at the wrong time,
I hope you're shown the mercy I plead for.

Now they've killed me,
Not knowing that I was long gone.





THE ECOSPIRE TEAM!

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Follow us on Instagram!

Send in your submissions for the next edition:
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ROTARACT CLUB OF MANIPAL

ANNUAL REPORT (2022)

This year began with our membership drive, from 5 January to 15 January 2022, for students of allyears at MIT, DOC, WGHSA, SOM, MSAP, and MIC. The effort drew the attention of enthusiastic individuals committed to social service. The Rotaract Club of Manipal welcomed over 150 students to begin their journey as proud Rotaractors.

Following this, on International Women's Day, we collaborated with Project Mudra to hostan interactive online event named "Cascade." Mrs. Ritu Patodia Bagla, senior banking, andretail executive, was the speaker of the event. It was a great learning experience as it helped raise awareness of working women's challenges while attempting to thrive in various areas.

The Rotaract Club of Manipal conducted a blood donation drive in collaboration with KMC,Manipal, on March 27, 2022, in MIT Food Court 1. The MIT director, Cdr. Dr. Anil Rana, too, graced the occasion. The event was a huge success, with 180+ units of blood being collected.





We also conducted a cloth donation drive on 1st May 2022. The clothes were collected fromhostels on the MIT campus before the drive. The clothes were donated to youngsters of "Sri Krishna Balaniketan" in Udupi, Karnataka, and the slums around the "Beedinagude Stadium."

On 4th June 2022, on the occasion of World Environment Day, Rotaract Club of Manipalparticipated in a plantation drive on 4th June 2022 in the MIT campus and at Asare, a mental rehabilitation center in Udupi.







RCM extended its hands by reaching out to people in need and contributing in various wayspossible. A water purifier and mixer grinder were donated to Asha nilaya and Karunalaya, respectively. We also made a monetary donation of Rs 11,000 to Hosabelaku. A sanitary pad distribution campaign was conducted with Project Mudra, where we donated sanitary pads worth Rs. 10,500.

We also continued our tradition of organizing Community Contact Programs on Sundays. This year, we had both online and offline CCPs.

In October, we participated in a noteworthy beach clean-up drive," COAST TO COAST," a collaborative endeavor facilitated by three RIDs, including our district RID 3182. This collaborative drive saw a commendable participation of over 150 individuals.
October also witnessed the auspicious occasion of Laxmi Puja, an event that brought together students from diverse parts of India, fostering a sense of unity as we Celebrated Diwali on campus. We also donated an almirah to Asha Nilaya.



November 6, 2022, marked an important date for us, as we collaborated with KMC, Manipal, to host another blood donation drive in MIT food court 1. Our efforts were joined by Nasha Mukt Club Manipal and NCC, with the presence of MIT director, Cdr. Dr. Anil Rana, adding to the significance of the occasion. This initiative resulted in remarkable success, collecting over 140 units of blood that undoubtedly contributed to saving lives.







Towards the year's close, our annual membership drive saw active participation from students. The drive attracted passionate individuals dedicated to social service, resulting in over 120 students joining the Rotaract Club of Manipal to embark on their transformative journey as proud Rotaractors.

Our Community Contact Programs (CCPs) tradition remained steadfast throughout the year. We facilitated successful visits to places such as Home Of Faith, Asare, Asha Nilaya, and Vishranti Dhama, showcasing the dedication and compassion of our Rotaractors.


Rotaract


Rotaract








Rotaract

The Rotaract Club of Manipal provides a steadfast platform that brings together determination and purpose, fosters relationships through service, and upholds the values of honesty, camaraderie, and altruistic service. We continually strive to create a difference, firmly adhering to our motto, “ No work beneath us, no task beyond”.

TAPMI
(A constituent unit of MAHE, Manipal)

Sharing In Progress Report 2020-2022

T A PAI MANAGEMENT INSTITUTE
MANIPAL

&

T. A. PAI CENTRE FOR SUSTAINABILITY
AND COMPETITIVENESS

SUSTAINABILITY@TAPMI





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TAPMI

(A constituent unit of MAHE, Manipal)

TAPMI

SUSTAINABILITY@TAPMI

T. A. Pai Centre for Sustainability and Competitiveness

AACSB ACCREDITED

ASSOCIATION OF MBAS ACCREDITED

PRME Principles for Responsible Management Education
CHAMPIONS
2020-2022

SOCIAL ENDEAVOUR GROUP #BETHECHANGE

DECADE OF ACTION

SCOT SUSTAINABILITY COMMITTEE OF TAPMI

TAPMI
(A constituent unit of MAHE, Manipal)

ADDRESS FROM THE DIRECTOR

Welcome to the T A Pai Management Institute. A campus nestled amidst 44 acres of pristine natural beauty and green forests. At TAPMI, we are acclimatized to living within greenery and as a result, take sustainability very seriously. We are proud to be signatories of the United Nations Principles of Responsible Management Education and to have been the only school in India in the Champions Cycle from 2018-19 to 2020-22. This is indeed an honour and testimony to TAPMI's commitment to sustainability.

The last couple of years has been very challenging for the entire human population. We have been brought down to our knees by the pandemic and life as we know it has completely changed. The pandemic has impacted all aspects of our lives, especially our businesses and enterprises. Livelihoods have been impacted across the globe and lives have been changed irreparably. As a business school, we have been brought face to face with the need to build resilient leaders who can create systems that can withstand shocks. TAPMI has chosen to rise to the challenge and has ensured that it remained committed to sustainability through these trying times.

Our flagship program, SEVA works closely with local entrepreneurs and provides them support and handholding to optimise their businesses. During the pandemic, TAPMI moved its classes to the online mode and hence students were not available to be physically in touch with these local stakeholders. But we did not abandon the process and continued the SEVA programme on the online mode as well. Students worked with local entrepreneurs on their specific problem statements and enabled optimization of their businesses even from a distance. One project, for example tested sustainable packaging for milk products and sent the samples with results and pictures to the client via mail. Another provided mushroom growing kits to gardener clients via e-commerce websites and trained them to use the same via their telephones!

Over the past two years, we have learnt that our businesses and our entrepreneurs need to be risk-absorbing and resilient. We need to build systems and processes that can withstand hurdles and pitfalls and at TAPMI we are committed to the same. We have enabled students to understand the needs of sustainability in the current context and are creating industry ready leaders capable of handling the challenges of the future.

Come visit us in green TAPMI and let's put our heads and hands together to build better communities in a more resilient world.



Prof Madhu Veeraraghavan
Executive Director – Management Studies (MAHE),
Director – TAPMI and T. A. Pai Chair Professor of Finance.

FOREWORD FROM HEAD – SUSTAINABILITY@TAPMI

'Touch a 100,000 lives in impactful ways by 2030' – this is our goal for the remainder of this United Nations 'Decade for Action' for achieving the SDGs. The time for action is now.

At TAPMI we have embarked on this journey to mainstream sustainability within curricula, research, projects and partnerships. Since 2019, when we submitted the last SIP Report, we have incorporated sustainability concepts, toolkits and frameworks within many more core courses and electives across functional areas, i.e., finance, accounting, economics, marketing, operations, human resource management, technology & analytics and strategic management, in all our MBA Programs.

In terms of thought leadership, SDG compliant or SDG based research, at TAPMI, has become deeper and more impactful. Many more researchers now count SDG related issues as a major focus of their research portfolios. We have published many more newspaper and magazine articles on sustainability and conducted several training and capacity building programs with government, civil society, industry associations and communities.

Through SEVA, our flagship field-based course and via direct engagement with local government, NGOs and businesses large and small, our project portfolio now consists of upwards of 50 engagements each year. Our projects typically focus on one or a few management related issues and solve to set direction, improve efficiency, create circularity, optimize operations on both supply and demand sides and augment competitiveness overall.

Our partnerships reflect our commitment to excellence, to benchmarking the best in the world and our desire to develop deep collaborations to act while we still can. The SDGs are too important for us not engage with, act on and be material.

As this report goes to e-print, we are finalizing architectural design of a 10,000 sq ft sustainability hub on campus which will house training, classroom and conference facilities, open plan office spaces, collaboration spaces, spaces for yoga and other contemplative practice, an innovation lab, tinkering and maker space, showcasing areas, an organics & fairtrade store, a café that will advocate healthy living and support small producers and a mini amphitheater.

We have also inducted our first batch of the Bachelor of Business Administration (BBA), Honors Program, at our recently inaugurated Bengaluru campus, this very week. We have extensive intention and plans to roll out all the above aspects and more at our Bengaluru campus.

To every reader of this report, we welcome the opportunity to collaborate in any way you would like, whether via classroom engagement, curriculum development, joint research, student & faculty exchange, joint projects and creating coalitions.

In anticipation of more circular, greener, equitable and profitable times,

With sincere regards,



Ishwar HARITAS
Head and Coordinator, T A PAI Centre
for Sustainability and Competitiveness
Chairperson: MBA-IB
Area Chair: Strategic Management &
International Business





INTRODUCTION TO TAPMI AND TCSC

T A PAI MANAGEMENT INSTITUTE (TAPMI) AND TAPMI CENTRE FOR INCLUSIVE GROWTH AND COMPETITIVENESS (TCSC)

The student city of Manipal, Karnataka plays host to the T.A. Pai Management Institute, fondly known as TAPMI. With academic rigour and experiential learning at its core, TAPMI's Post Graduate Diploma in Management Programs is approved by All India Council for Technical Education (AICTE) since its constitution.

Established in 1980, TAPMI is one among the 7 institutes in India and 5% of the top business schools worldwide to have been honoured with the illustrious Association to Advance Collegiate Schools of Business (AACSB) accreditation, the oldest and toughest accreditation in the world of business education. It is also the 5th institution in India to have both the AACSB as well as Association of MBAs (AMBA) accreditation.

The mission of the school is "To excel in post-graduate management education, research and practice" and the means to achieve the same are through a combination of –

- Nurturing and developing global wealth creators and leaders.
- Continually benchmarking ourselves against the best-in-class institutions.
- Fostering intensive learning and reflection, achievement orientation, creative interdependence and respect for diversity.

TAPMI's value bounds are testimony to our commitment to sustainability since we believe in "Holistic concern for ethics, environment and society." We take pride in the academic rigor and relevance practiced at TAPMI. We imbibe thorough business knowledge in students, making them business ready right from the first day. We also believe in the power of experiential learning, one of the pillars of education at TAPMI. Every element in our action based and outcome centric curriculum is geared towards teaching students through real experiences. Case study-based teaching lessons, simulation games, Management in Practice (MIP), SEVA live projects for sustainability, Brandscan and Exchange Programs are a few engagements that take students beyond the four walls of the classroom and instil leadership qualities that enable the students to tackle business challenges head-on.

TAPMI is an advanced signatory of UNPRME (Principles for Responsible Management Education) and has introduced sustainability aspects in the course curricula, research, student and

Industry engagement in accordance with the 6 principles of PRME-

Purpose; Values; Method; Research; Partnership; Dialogue

The initiatives aim at imparting management education that will enable the leaders of tomorrow strive for success that would not be ephemeral but would, instead, result in a sustainable and substantial positive impact. TAPMI is also a proud member of Champions Group, comprising 34 leading business schools from around the world and the only one in India, for the 2018-19 and the 2020-22 cycle.

Named after our founder, Shri. T.A. Pai, TAPMI was established with a vision of creating responsible business leaders, leaders who dream and achieve but with a resolve to make a difference. This is what we seek to create.

TAPMI is not just a B-school, it is a centre of business excellence with over 30 years of experience in academics, research and Executive Education. We, at TAPMI, seek to promote and raise the standard of finance and management research in the country with our Banking and Finance Centre and the Ph.D. program. TAPMI's Executive Education course was introduced with the aim to improve management practice in the industry. It enables existing managers to develop capabilities to transform themselves and their companies.

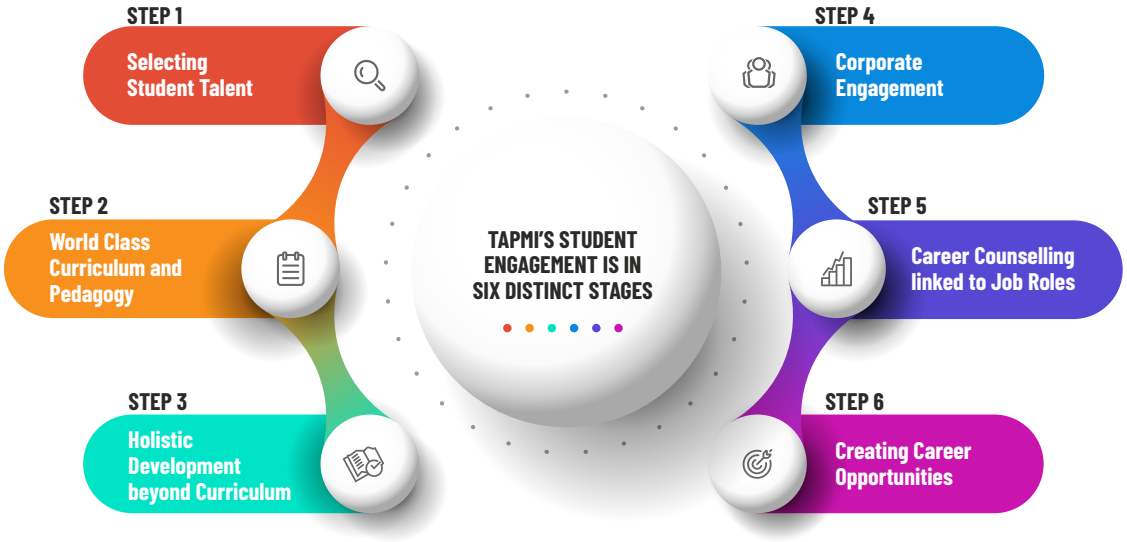
Currently TAPMI offers a core Management in Business Administration (MBA) Program and sector specific MBA programs in Banking and Financial Services (BKFS), Marketing and Sales Management (MSM), Human Resource Management (HRM) and International Business (IB). This apart, TAPMI is actively involved in executive education, external projects, consultations etc. We have a total alumni base of 5000+ who are currently holding successful positions across the globe with one-fifth being in CXO positions. We have over 60 highly trained and accomplished faculty and over 65 committed support staff members. We operate out of a 44-acre campus with state-of-the-art facilities and amenities for all stakeholders.

TAPMI is part of the larger education ecosystem of Manipal Academy of Higher Education(MAHE). TAPMI has a long 40-year history of delivering quality management education. Its faculty members come from strong research or industry background and go through international training to create high level of competence in setting and meeting standards. Accreditation by international agencies such as AMBA and AACSB assures quality and compliance to cardinal principles of imparting management education. TAPMI's policies and programs are designed with a focus on the expectations of key stakeholders, recruiters and students.









Through each of these stages of student engagement, we are ensuring that sustainability is central to our dialogue and approaches. We hope that in the coming future we will be able to further strenghthen our engagement and commitment to this agenda.

ABOUT TCSC

TAPMI Centre for Inclusive Growth and Competitiveness is the hub of all sustainability related activities at TAPMI, and leads/supports activities including agenda setting, external relations with relevant stakeholders, collaborations with other sustainability related organizations/institutions, program management and reporting at institutional level.

TAPMI has committed itself to training students in the triple bottom approach towards sustainability. With this in mind, social, environmental and economic sustainability are the key elements of training imparted to students. This enables them to evolve as future managers and path bearers towards making sustainability integral to the economic and development dialogues of nations.

As a first few steps, TAPMI, and specifically the Centre for Inclusive Growth and Competitiveness (TCSC), have looked at inculcating aspects of sustainability with a three-pronged approach – spreading across its curriculum, its research and its project and partner involvement.





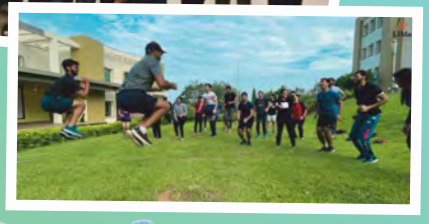
THE TAPMI MANIPAL MODEL





With these basic processes and the longer impact in mind, our institution and our centre aim to work in collaboration with stakeholders to ensure that value is added to all players in the larger economic and development scene across geographies today.









TAPMI AND THE GLOBAL GOALS



TAPMI's work is closely linked to the SDG Global Goals. Through the approaches of our curriculum, teaching, live projects, project and partners, research and student activities, we are actively involved in promoting the SDG Goals. Our teaching focuses on promoting industry and innovation (SDG9), work towards climate action (SDG 13) and on decent work and economic growth (SDG8). Through our live projects and student teams we work on reduction of poverty (SDG1), good health and wellbeing (SDG3), quality education (SDG4) and gender equality (SDG5). Through our engagement with local governments, we have worked on projects related to access to clean drinking water (SDG6) and on better means of waste disposal, cleaner and safer communities and cleaner sanitation habits (SDG11). Our aim, through our projects is to provide better opportunities to the vulnerable through skilling and training coupled with to better opportunities (SDG10).

In the more specific scheme of things, our work is largely centred around four specific goals. As a business school, we are aware of our skills and believe that we can create value best in the goals of gender equality (SDG5), decent work and economic growth (SDG8), industry, infrastructure and innovation (SDG9) and responsible consumption (SDG12). Using these goals as our cornerstone, would enable us to achieve simultaneous progress in the other goals as well.

REMEMBERING THE LEGEND, SHRI T A PAI
100 YEARS OF RELENTLESS WORK IN SUSTAINABLE DEVELOPMENT



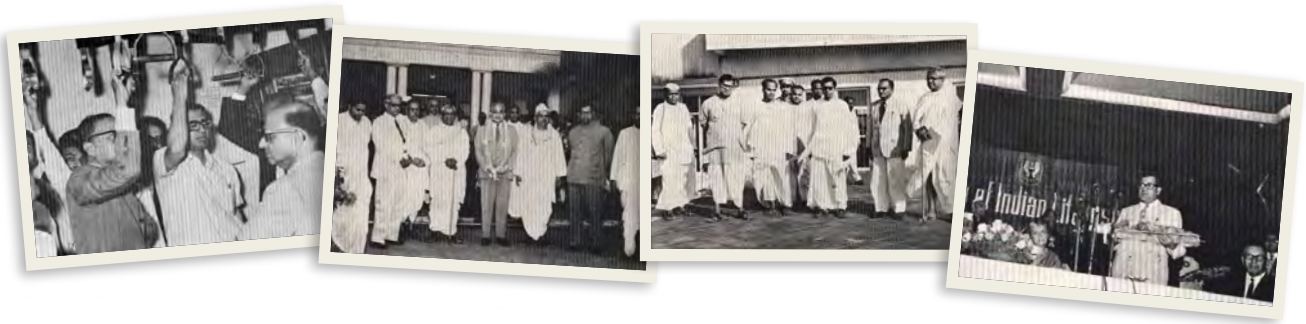
The town of Manipal is a testimony to how a small place can achieve greatness due to the efforts of a few people, and, in turn, shape the destinies futures of thousands of men and women. A small town nestled between the Sahyadri hills and the Arabian Sea, Manipal today perhaps has many times more than its share of top-class institutions. The year 2022 is the birth centenary year of the birth anniversary of Shri T A Pai (17 January 1922 – 29 May 1981), one of the few men who catapulted a small village into a model for the world to emulate follow.

In a career spanning over thirty-eight years, Shri T A Pai's contributions to nation-building took many forms. He played roles as a politician, held positions such as that of the Railway Minister of India, was in the education, insurance and banking sectors. He founded the T. A. Pai Management Institute, which went on to become one of the top business schools in the country. As we speak of responsible management and sustainability, we remember Shri T A Pai and his remarkable contributions at when he was with the Syndicate Bank where he worked on social development and social sustainability.

His pioneering work was in helping to develop the banking sector in India. Shri T A Pai joined Syndicate Bank as a Deputy Manager in 1943 immediately after graduating from Sydenham College of Commerce and Economics at Mumbai. Under Shri T A Pai's stewardship, Syndicate Bank embarked on pathground-breaking rural expansion programs with innovative features. Many rural branches were opened all over South Canara district with active participation of village representatives to ensure that financial services are available to every citizen of India.

The focus was always on small customers. The largest deposits and biggest loans were in the range of few thousands in most branches. While service to the community was a common thread that ran through all the operations of Syndicate Bank, the business objectives were never out of sight. Shri T A Pai and his predecessors had realized the responsibility of, and the value in, providing service to a large number of small customers long before the currently popular terms like "fortune at the bottom of the pyramid" and "microfinancing" had emerged! Shri T A Pai also saw great value in women as account holders. This belief stemmed from his grassroot level interactions with villagers. He had noted that large number of women who traded in vegetables and fish did not have means for saving their money and ended up losing their hard-earned money to unscrupulous men, often their own husbands. He ran a campaign and the bank ended up getting thousands of savings accounts of these women. His respect for women as stakeholders in the country's development also showed up in another area: employment. Immediately after his taking over as the Managing Director in 1962, Syndicate Bank created history by opening an all-women branch in Bangalore. Many more such branches were to follow.

Shri T A Pai's view was that banks should not be passive spectators in a country's economic development. He felt that banks must participate in sectors that were traditionally considered as 'risky' and unremunerative sectors such as agriculture and invest in its potential rather than stay aloof. He set up an Agricultural Finance Department and started financing pump sets for irrigation which turned out to be a profitable venture for Syndicate Bank. The objective in this and many other initiatives was always simple: structure



the loan in such a way that the farmers would actually repay. He also had great belief in the cooperative society movement and helped set up and run agricultural and milk cooperative societies.

In 1970, Shri T A Pai was appointed as the chairman of Life Insurance Corporation of India (LIC), the national insurance provider available to all in India. Under his leadership, LIC became a progressive organization and increased its business manifold. True to his form, he pioneered the idea that the insurance premiaums can be used for nation-building activities such as lending to the lower income groups for house-building building houses, and for civic amenities projects. Pleased with the way he turned around LIC, the government conferred on him the award of Padma Bhushan (a national honour in India) in the year 1972.

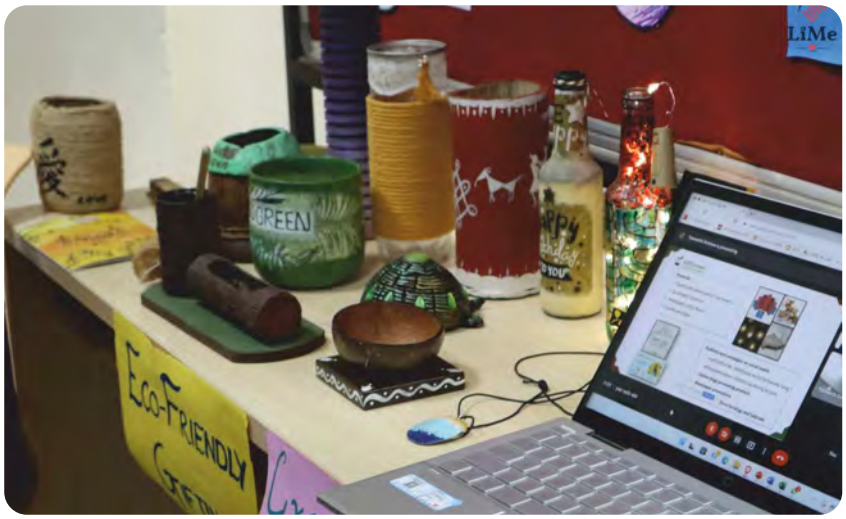
Shri T A Pai was also the first Chairman of the Indian Institute of Management, Bangalore, a premier business school in India. His commitment to nation building and dedication to social development have made him a torch bearer in India's illustrious history. His work was a vindication of testimony to the principles of sustainability that we today aim to equip management students with. Today, we can link the work he did decades ago to various SDG goals including goals for economic growth (SDG8), poverty alleviation (SDG1), quality education (SDG4) women's empowerment (SDG5) and in building resilient cities and communities (SDG11).

This year, 2022, T A Pai Management Institute commemorates celebrates in its esteemed founder with a series of events that have been lined up across the course of the year. From community activities to educational and corporate events, TAPMI Manipal has planned to involve every stakeholder and uphold the values dear to of its illustrious founder.



I

SUSTAINABILITY@TAPMI – INTRODUCTION



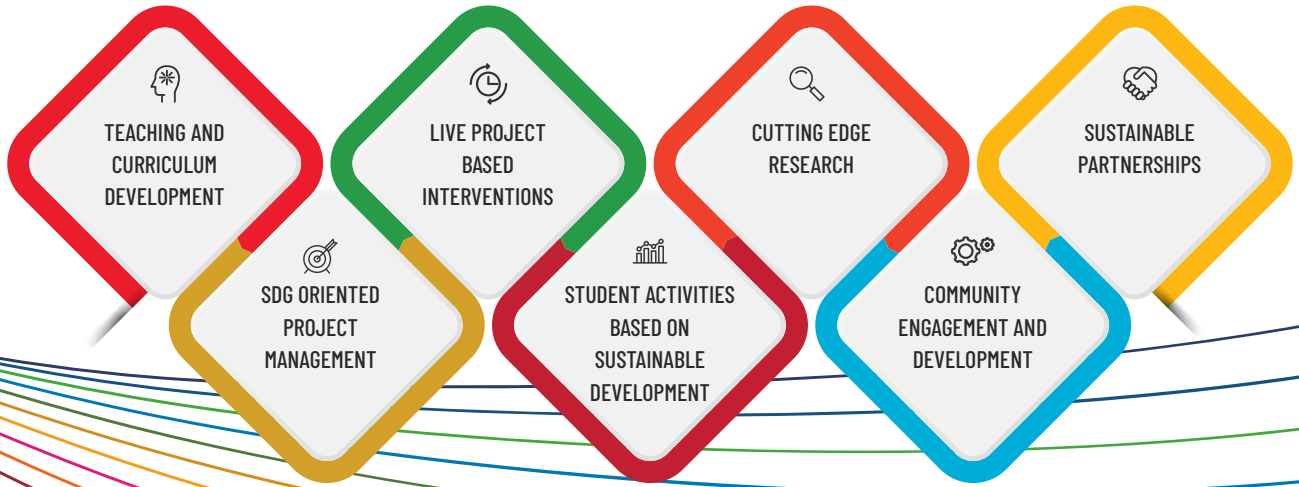
At the T A Pai Management Institute (TAPMI), Manipal, we believe that imparting knowledge and skills to contribute towards sustainable development is an essential part of creating business leaders for tomorrow. TAPMI is committed to education for business excellence keeping tenets of sustainability in mind. People, planet and profit are central to our teaching at TAPMI and we believe in creating minds that are equipped to deal with the challenges of the future.

TAPMI looks at sustainable development in all aspects of its work, from student engagement, partner engagement, management of our premises to cutting edge research in sustainable development. Sustainability is a critical part of the TAPMI way of life. From research based on SDG goals, community engagement and participation in local development, curricula, live projects and partnerships in the spheres of sustainability, we at TAPMI, have integrated sustainability into our processes.

TAPMI's engagement with sustainability can be encapsulated into specific processes. These can be broadly classified into the following –

TAPMI's engagement with sustainability can be encapsulated into specific processes. These can be broadly classified into the following –

Integrating sustainability into every aspect of work, TAPMI believes that future leaders can be created to function as catalysts of holistic growth.

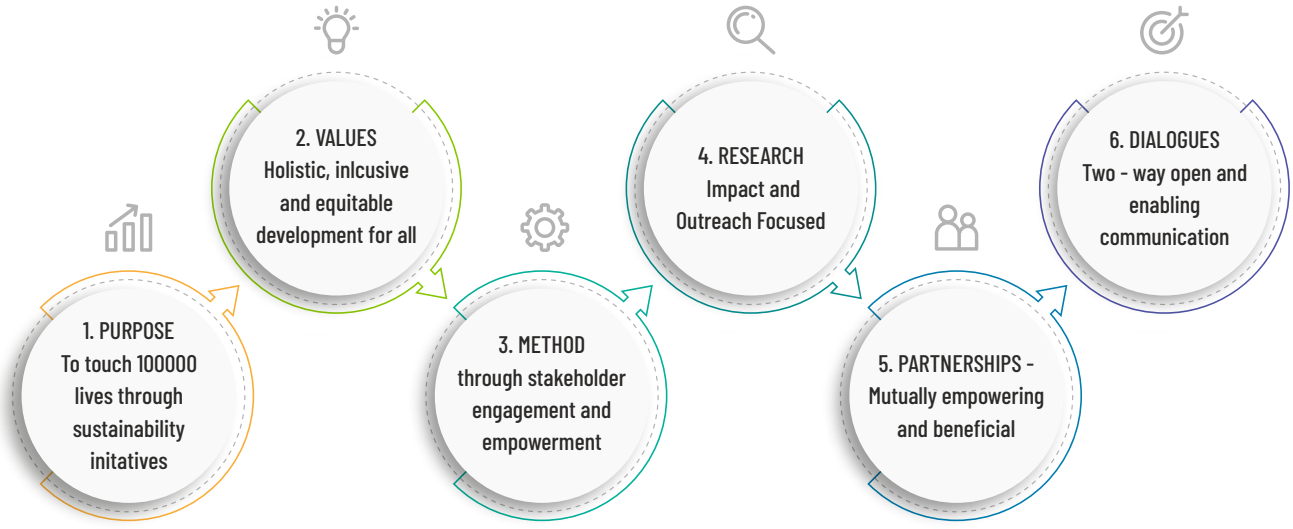


II

SUSTAINABILITY@TAPMI - TAPMI AND PRME PRINCIPLES



TAPMI'S APPROACH TO SUSTAINABILITY



III

SUSTAINABILITY@TAPMI - STAKEHOLDERS



STAKEHOLDERS	EXAMPLES
Policymakers	Local decentralized government offices including departments such as tourism, horticulture, public works department
Non-governmental Organisations	Organisations working for the needs of tribal communities, working with rural poor, rural artisans, working with persons with disabilities
Micro-businesses	Organic edible producers, natural textile producers, dairy producers and cooperatives and clean energy based livelihood producers
Entrepreneurs	Entrepreneurs, especially women, creating local delicacies and edibles, beauty products, eco-friendly hand made products, owning service provisions businesses such as tailoring units, local catering units etc
Individuals	Experts in waste management, architects looking to work on earth-friendly constructions, individuals working to revive traditional textile arts etc
Associations	Farmer producer organisation, dairy cooperatives, artisan collectives etc

IV

SUSTAINABILITY@TAPMI – CURRICULUM

The need for sustainable development and the impact of unsustainable global practices have been widely researched and extensively documented over the past few decades. The amount of literature available on these issues is vast and comprehensive. Yet, one cannot expect young business students to be well aware or equipped with such knowledge. There is a need to extract such information from formal reports and research papers and integrate them into classroom conversations and discussions.

At TAPMI, we believe that students need to be integrated into the sustainable way of thinking and also be equipped with knowledge, facts and data when it comes to making decisions about sustainable business. We keep in mind that essentially, we are a business school and hence we need to train our students to be effective business leaders who understand sustainability in the business sphere well. In order to do this, we have integrated sustainability aspects into the curriculum and have introduced subjects that tackle the issues of sustainability headlong. TAPMI's aim is to ensure that sustainability is integrated into the curriculum using multiple mechanisms that enable holistic learning. A visual representation of the facets of sustainability curriculum development in TAPMI looks like –



At TAPMI, we strive to impart sustainability education through the integration of facets of the Triple Bottom Line. We have looked at sustainability as social responsibility, economic performance and environmental sustenance. TAPMI has looked at incorporating these aspects of sustainability into curricula in a wide variety of methods. This has been done through introduction of new courses where sustainability is the main focus of discussion, through live projects where students get a hands-on experience of sustainable development and through inclusion of sustainability dimensions into existing traditional business subjects.

"At TAPMI, sustainability in engrained in the curricula from the day a student enters this institution. We believe that management with a focus on sustainability is essential to prepare students for the challenges of the future. We have introduced courses that focus on imparting SDG oriented inputs through theory and experiential learnings. This process has not only enhanced student learning but has also added to faculty growth as well."

Prof Gururaj Kidiyoor,
Professor and Dean Academics, TAPMI



The TAPMI Sustainability Education Model in a nutshell looks like

The TAPMI Sustainability Education Model in a nutshell looks like –

New Course Introduction	Sustainability, Responsibility and Managerial Ethics (SRME)	Classroom-based course on sustainable and responsible business
Subject specific course intervention	Business Impact Planning for Social Enterprises	Course in collaboration with MIT SolvEd
Live-Project Based Courses	Society, Environment, Values and Attitudes (SEVA)	Six month long live internships with community projects on the 3BL
Integration of sustainbility facets into existing courses	Eg - Managerial Statistics, Managerial Communication	Eg - Managerial Statistics, Managerial Communication

I. Sustainability, Responsibility and Managerial Ethics (SRME) Aligned to SDGs (8, 9, 10, 11, 12 and 13)

Program	Couse Name	Credit	Keywords
MBA Core MBA BKFS MBA HRM MBA MSM	Sustainability, Responsibility & Managerial Ethics (SRME)	2 credits	Sustainable business, Corporate Social Responsibility, Circular Economy, Sustainable Business Model Canvas

*MBA Core - General Management | MBA BKFS - Banking Program | MBA HRM - HR Program | MBA MSM - Marketing program

Sustainability, Responsibility & Managerial Ethics equip business students with the necessary knowledge, tools, skills, and self-perception to become responsible managers. In order to realize these goals, this course provides a very profound overview of the conceptual development of the field of responsible business and management. This course will help in understanding the three main domains viz –

- The 'Sustainability' domain aims to create a positive triple bottom line, and to contribute towards a healthy circular economy.
- The 'Responsibility' domain addresses stakeholder concerns and optimizes stakeholder value.
- The 'Ethics' domain highlights the ethical issues, challenges and opportunities for modern businesses, while encouraging moral excellence.

The objectives of this course can be broadly categorized into –



The course was started in the year 2018 and has since become one of the foundation courses for all the students who enroll for their management studies in TAPMI, irrespective of their specialization or course. The total first year batch of over 500 students is given access to this course and indoctrinated into the sustainable way of thinking. The course faculty uses innovative methodology to teach the course and ensure that discussion, debates and current information on sustainability are actively used in the classrooms.

Some of the topics covered in the course include –

- Triple Bottom Line
- Circular Economy
- Corporate Social Responsibility
- Corporate Shared Value
- Sustainable Business Model Canvas
- Social Entrepreneurship
- Ethical Leadership
- Ethics in Management

All topics are covered with current global and local examples and guest lectures as well as recent events and news are covered along with assignments and discussions to keep students abreast of the latest in sustainability and the business world.

II. Society, Environment, Values And Attitudes (SEVA) aligned to SDGs (1, 5, 8, 9, 10, 11)

Program	Couse Name	Credit	Keywords
MBA Core MBA BKFS MBA HRM MBA MSM	Society, Environment, Values and Attitudes (SEVA)	2 credits	Design Thinking, Social Impact, Stakeholder engagement, Project based learning

Society, Environment, Values and Attitudes is a 2-credit course that is entirely live project based. SEVA is a core foundation course at TAPMI which aims at introducing all business students at TAPMI to the precepts of sustainability through the lens of the Triple Bottom Line. Projects that correspond to either social responsibility, economic advancement and/ or environmental protection and conservation are identified, and students are placed in groups of ten with a faculty mentor to work directly with the client. Principles of design thinking are taught and followed for the entire project process. Each group is given a small grant fund to use to test out prototypes and solutions for the client.

Clients of the SEVA projects range from social entrepreneurs, women micro-entrepreneurs, sustainability experts, non-governmental organisations, local government bodies to corporates and waste management institutions, to name a few. SEVA introduces students to live, functioning NGOs, enterprises and individuals who are creating / attempting to create superior societal / environmental value. Students spend between 75-100 hours on the ground, in class and self-learning mode, to devise solutions to management issues faced by small and micro-entrepreneurs, NGOs, the district administration, corporates and other relevant actors. SEVA students will actively explore opportunities to connect small-scale producers to mainstream value chains, to apply modern management principles in different functional areas to decrease operational inefficiencies, improve top-lines, introduce the use of information and communication technologies (digitalisation) and thus improve overall business health of the beneficiary.



Below is a snapshot of SEVA projects and clients over the past couple of years

SEVA YEAR	SEVA PROJECTS	SEVA STAKEHOLDERS	SDG MAPPING
2018-19	40 PROJECTS	Govt – 3 NGOs – 5 Corporates – 3 Social Enterprises/ Farmer producer orgs (FPOs) – 2 Educational Institutions – 1 Financial Institutions – 1 TOTAL-– 15 STAKEHOLDERS	SDGs – 1, 5, 7, 8, 9, 10, 11, 12, 15 SDG 1 – 2 Projects SDG 5 – 3 Projects SDG 7 – 6 Project SDG 8 – 11 Projects SDG 9 – 3 Projects SDG 10 – 2 Projects SDG 11 – 9 Projects SDG 12 – 2 Projects SDG 15 – 2 Projects
2019-20	39 PROJECTS	Govt – 2 Corporates – 1 Social Enterprises/ Farmer producer orgs (FPOs) – 7 Educational Institutions – 3 Financial Institutions – 1 Total-– 21 STAKEHOLDERS	NGOs – 7 SDGs –8, 10, 11, 13 SDG 8 – 20 Projects SDG 10 – 4 Projects SDG 11 – 10 Projects SDG 13 – 5 Projects
2020-21	41 PROJECTS	Govt – 3 NGOs – 12 Social Enterprises/ Farmer producer orgs (FPOs) – 12 Educational Institutions – 2 Financial Institutions – 1 TOTAL-– 30 STAKEHOLDERS	SDGs –8, 9, 10, 11, 13 SDG 8 – 19 Projects SDG 9 – 1 Projects SDG 10 – 3 Projects SDG 11 – 12 Projects SDG 13 – 6 Projects
2021-22	50 PROJECTS	Govt – 6 NGOs – 10 Corporates – 3 Social Enterprises/ Farmer producer orgs (FPOs) – 16 Educational Institutions – 3 Financial Institutions – 2 TOTAL-– 40 STAKEHOLDERS	SDGs –1, 5, 7, 8, 10, 11, 12, 13 SDG 1 – 3 Projects SDG 5 – 3 Projects SDG 7 – 3 Projects SDG 8 – 15 Projects SDG 10 – 4 Projects SDG 11 – 12 Projects SDG 12 – 2 Projects SDG 13 – 8 Projects

The year 2020 was especially challenging with the world in general, and the country, dealing with a severe pandemic. COVID 19 had prevented students from having access to the local communities and stakeholders in the Udupi-Manipal region where SEVA is essentially based out of. Keeping this current scenario in mind, TAPMI made the best out of a bad situation and expanded the scope of SEVA to a national context. We believed that the problem statements and issues identified with the various stakeholders of SEVA are mirrored in similar sectors across the country. Hence, we expanded the reach of SEVA to a national sector-wise focus to understand the issues and challenges as well as identify possible solutions and innovations to common problem statements. Students worked with clients and were able to learn and work with actors in their own specific



locations as well, which further enriched the outcomes.

In the year 2022, SEVA has taken its former shape again with the projects becoming local projects with scope to physically visit them same. Yet, it in the past 2 years, we have been able to start work with some excellent problem statements and clients across the country and hence wanted to take those forward as well. As a result, projects this year either have a local client or the potential for a local field visit to enable hands-on experiences for the students and prototyping of solutions.



SUSTAINABILITY@TAPMI
FACULTY TESTIMONIALS



"SEVA from a strategy Professors point of view is an extension of the case method pedagogy. An opportunity to present business management issues in a non-traditional setting with atypical clients and contexts. The UDUPI Mallige (Jasmine) is a traditional cash crop from the UDUPI district, grown by farmer families in small gardens and sold locally and in places as far as the Middle East via a network of agents and exporters. Our SEVA project group worked to find ways to further develop the product via value addition and market development for new uses."

Prof. Ishwar
Associate Professor, TAPMI - MAHE

"I found that students relish that their findings are actually implemented by the grassroots level setup. A satisfaction their work is benefiting someone."

Prof. Jayanthi
Associate Professor, TAPMI - MAHE





"The preservation of historical assets and iconic structures is valued by people worldwide. The Hasta Shilpa Heritage Village project helped us to know relics of our history, a testament to continuity across time, and inspired us with a profound feeling of surprise and delight about our rich heritage."

Prof. Maninder Singh
Faculty Associate, TAPMI - MAHE

PROJECTS IN FOCUS

PROJECT NAME - Promotion of the local handloom sari and market survey project



CLIENT TYPE – Non-governmental organisation working with a weaver's collective

SDG FOCUS – SDG 8 Decent Work and Economic Growth (12 - RESPONSIBLE CONSUMPTION AND PRODUCTION)

PROJECT DESCRIPTION - The primary goal of this project was to learn about the various handloom sari industries in the local area, to understand the problems in the handloom sari supply chain, and to learn about customer preferences and purchasing behaviour for handloom saris.

STUDENT PROJECT LEARNINGS – The learning from SEVA project included understanding the client's problem and communicating with the client about the specifics of the business. This apart, students also honed their problem-solving skills which were one of the major learnings such as creating diversified product offerings at different price categories. Students also understood the importance of good digital marketing and a uniform social media presence and how it is essential for product awareness. They also cultivated an understanding of the need for alternative procurement and a more efficient supply chain management for a business to succeed and reach its entire target market

"Studying at an institute that is a PRME Champion, it was a great experience applying the concepts of sustainability practically. Through SEVA we were aware of the contributions and efforts put in by the locals towards sustainability.

SEVA was a refreshing experience that allowed us to develop fast team working skills amidst the rigour of academics. We were given a project and asked to come up with a problem statement. Through each step, the final goal was not clear but as we progressed through the stages, working together we managed to find new and innovative ideas along with possible solutions. What was very interesting was that everyone contributed in their own way and brought something to the table. The entire process of setting up the shop, marketing the products, and speaking of sustainability also allowed us to change perspectives on potential lifestyles."

Apoorva, Student, TAPMI





"With every year there is a growth and sense of responsibility in the student group, there is also a maturity in the evaluation and studies shared for my venture.

It is a wonderful experience to get fresh insights and perspectives from students about the business."

Ms. Mahalasa Kini
Proprietor of Udupi Saree

PROJECT NAME – Conducting a study on the impact of pandemic on the lives of children

CLIENT TYPE – Non-governmental organisation working with local daily wage workers and children living in rural poverty

SDG FOCUS – SDG 10 – Reduced Inequalities

PROJECT DESCRIPTION - The COVID-19 pandemic has changed the way people live and see their future, especially children. The client – 'Concerned for working children' (CWC) has been working with marginalised children since pre-pandemic times. The students of the TAPMI were associate with CWC to help them analyse the impact of COVID-19 pandemic on the lives of children.

STUDENT PROJECT LEARNINGS – The SEVA project was an excellent learning experience for the students and allowed them to explore their inner curiosity. The client CWC was directly involved in working for the betterment of the lives of children who are impacted by the COVID-19 pandemic. The major learnings included learning about the inequality in services or benefits provided, especially during the pandemic, and the dissonance of technology and essentials in the unorganized sector.



"This year SEVA was different and challenging as the project was online. Our team visited local water harvesting sites to understand methods of rainwater harvesting. Our instructor and client were enthusiastic and knowledgeable about the subject matter. The proposed solution was based on statistics and mathematical models, and was appreciated by stakeholders. I thank my institute, TAPMI for providing us this amazing opportunity to conserve environment through SEVA."

Adithi, TAPMI Student

PROJECT NAME - Vegetable Agri-produce promotion project



CLIENT TYPE – Farmer producer organisation (collective of farmers) and the Welcomgroup Graduate School of Hotel Administration, MAHE

SDG FOCUS – SDG 8 Decent Work and Economic Growth (12 - RESPONSIBLE CONSUMPTION AND PRODUCTION)

PROJECT DESCRIPTION - Vegetable Agri-Produce Promotion Project pertains to the Mattu Gulla Crop, a type of brinjal grown in the rural areas of Udupi, Karnataka. The said crop has already received a GI tag and enjoyed special protection under the Geographical Indications of Goods (Registration and Protection) Act, 1999. The present project pertained to helping improve the efficiency of the supply chain of the Mattu Gulla crop grown by the local farmers of the Mattu region in Udupi District. The Mattu farmers have always been extremely reliant on the middle i.e the wholesalers for the sale of their crops which allowed them to make very low profit margins. This problem intensified when the world was hit by the outbreak of the global pandemic COVID-19 virus.

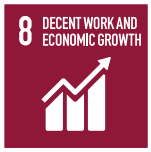
STUDENT PROJECT LEARNINGS – The project revolved around the Mattu Gulla growers' association and the issues they faced such as low produce of high quality brinjals, low shelf life and Supply chain complications. The students assisted in the conversion of raw brinjals to 5 different products that is Pickles (Sweet and spicy), Chutney powder, Sambar powder and dried Slices and mapped 4 of the SDGs to the project. They also did a complete cost analysis of setting up a manufacturing plant for the conversion of the above-mentioned products. The students saw how the MBA practices that they learnt at the classroom level were being applied in practice.



"Throughout the learnings at TAPMI, my perspective regarding the role of sustainability in management of an organization has changed a lot. This started with SRME and culminated in SEVA. I have been interested in sustainability from a long time, and this project gave me an opportunity to work on an initiative related to youth employment opportunities – which is a highly relevant topic in the current times. The learning that I have most implemented in this project is the concept of creating shared value through social enterprises, that both work towards building profits along with creating value for the community. In addition to this, the project offered several learning opportunities in terms of using social entrepreneurship as a career option, adapting and working with a new team on a relatively difficult project, interacting with clients and understanding and working on different requirements, and most importantly the integration of management subjects with sustainable strategies."

Akhil, Student, TAPMI

PROJECT NAME - Eco-friendly gifting store project

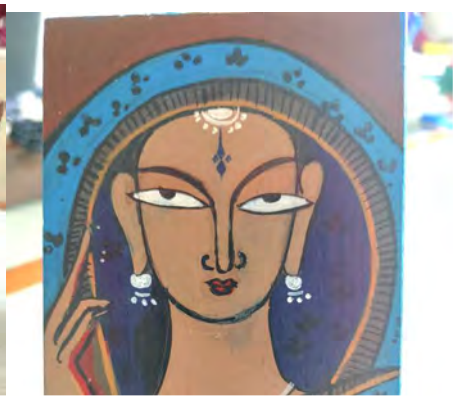


CLIENT TYPE – Woman owned social enterprise working with local artisans on eco-friendly gifting solutions

SDG FOCUS – SDG 12 Responsible Consumption and Production (8 - DECENT WORK AND ECONOMIC GROWTH)

PROJECT DESCRIPTION - This project was meant to understand the eco-friendly gifting market in India and promote the practice of eco-friendly gifting among students and localities in Manipal through the client's store, "CraftsMantra" using its upcoming online and current offline presence. The students also aimed to understand the eco-friendly gifting market in the country and hence, a national level with research was conducted. Research was conducted for eco-friendly gifting stores like Gift Green, Loopify, Voluntary Service Association, Shilparamam located in Mumbai, Pune, Delhi, and Hyderabad respectively. The research which was conducted in an online mode due to Covid-19 restrictions, gave a broad idea about the CRM Strategies, product variations for different market segments and their pricing strategies. Following the National level research, a survey was conducted within Manipal, to understand the current market perspectives about this sector and their key challenges with respect to the shift to sustainable gifting options. From the survey of more than 200+ students and in-depth interviews of 10 students, it was realised that 59% of the people were aware about this eco-friendly gifting sector and but given the option 40% hesitated to shift to the same. Some of the reasons for this hesitation included high price for sustainable products, less variety and minimal online presence of brands with such gifting options. This survey was however, restricted to students and staff within TAPMI due to lack of accessibility to localities in Manipal.





STUDENT PROJECT LEARNINGS – The team learned a lot throughout the SEVA expedition. The team had the opportunity to do local and national research on sustainability. One important area where sustainability is applied is eco-friendly gifting. The project also provided the team with the opportunity to collaborate directly with the client, who was available to discuss her experience and offer advice on the initiative's sustainability. The team was able to comprehend the amount of awareness that is already existing as well as the expansion of eco-friendly gifting thanks to the national level research.

Even after the COVID pandemic, the team had the opportunity to learn how to work together in a hybrid framework. It taught the team how to cooperate and synchronise with a team of varied minds, how to coordinate and synchronise with the client or stakeholder, how to be accountable for completing the assigned duties, and how to work for the improvement of society and the environment.

The team was also taught the value of lowering their carbon footprint. Gifts that are eco-friendly can be reused, reduced, and recycled sustainably, all of which will help with the cause. The team learned to respect nature and the environment and work toward sustainability. It taught us to be patient and persistent with clients or stakeholders, to coordinate and synchronise with a team of people with different perspectives, to be accountable for completing the tasks assigned to us, and to work to improve society and the environment.

"Providing innovative solutions to business problems is one of the core management skills and sustainability is at the heart of it. SEVA gave me the opportunity to apply my management learnings and skills to real world problems and helped make a positive impact on society.

My SEVA project revolved around the Promotion of Women owned enterprises. SEVA helped me hone my interpersonal skills and problem-solving abilities by giving me the avenue to work with multiple stakeholders to create economic and environmental value in the facilitated viable business, operational and strategic solutions."

Kyati Varma, TAPMI Student

PROJECT NAME - Bio-technology Start-up Project-AION

CLIENT TYPE – Start-up working on health outcomes and biotechnology for the poor

SDG FOCUS – SDG 3 – Good Health and Wellbeing (9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE)

PROJECT DESCRIPTION - Mr. David Saldana founded the AION bedside health care monitoring system during his PHD research days in 2018. He designed a portable health vitals monitoring gadget that will record the patient's ECG, temperature (skin/rectal), blood oxygen saturation, and non-invasive blood pressure due to his interest in smart healthcare equipment. The vital information is then electronically transmitted to the entire hospital in real time. The data can then be accessible utilising the cloud service within the hospital framework. The client's initial goal was to sell the goods in Udupi, then the state of Karnataka, and finally the entire country

STUDENT PROJECT LEARNINGS – The students learnt about a device which would decrease the manpower need and help in better preparedness for the emergencies a patient might face. The whole data and system was automated to a centralized cloud which would help in better treatment of patients.

"Team headed by Purnima mam was just brilliant. The team really took the task in their own hands and have divided it equally. I have gained a great deal of knowledge working with the team. I wish each and every member the very best for their future endeavours."

David John Saldanha
Director, Aion health Solutions Pvt. Ltd.



PROJECT NAME - Blue Flag Beach Analysis

13 CLIMATE ACTION

CLIENT TYPE – Tourism Department, Government of Karnataka

SDG FOCUS – SDG 11 – Sustainable Cities and Communities (13 - CLIMATE ACTION)

PROJECT DESCRIPTION - India has 10 blue flag beaches of which 2 are in Karnataka. The students decided to conduct an analysis of the Padubidri Blue flag beach and identify gaps in them to ensure the beach management closes these gaps and meets the criteria laid down by the blue flag program.

STUDENT PROJECT LEARNINGS – The project gave the students an insight into the role that blue flag certified beaches play in preserving the environment and boosting the local economy. It helped them understand how society could contribute to beach safety and cleanliness, what measures beaches could take to become certified, and ultimately how it affects the growth of the local economy. To raise awareness and instil a sense of civic duty among the children at the neighbourhood schools, the team successfully conducted a presentation on blue flag beaches to them. Additionally, the team created a medical handbook to assist the first responders on the beach.

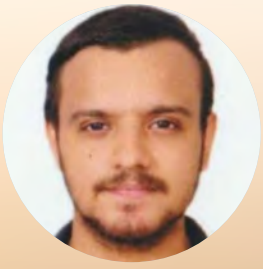






"SEVA, is till date my one of the best experiences at TAPMI. It was great implementing the theories we learnt in practical for our client and the best part was the implementation got successful. We concluded with a satisfied client and ultimately the winner of the grand SEVA JATRE. Would like to thank our mentor Prof. Srinivas Reddy for his constant support."

Mohit Kiradoo, TAPMI Student





SUSTAINABILITY@TAPMI
CLIENT TESTIMONIALS

"I have been greatly helped by the student team. I thank TAPMI students so much for their help."

Abida Banu, Proprietor, Udupi Nursery



"As the founder of Journeys With Meaning, I had an opportunity to work with a small but focused team of MBA students working on the SEVA project.

My experience of working with them on our marketing campaigns was very good, and I was very happy to see them apply their learnings and insights from their course in coming up with creative marketing campaigns and strategies for my organization."

Vinod Sreedhar
Founder - Journeys With Meaning

"The session with Students of TAPMI under the SEVA Guest Lecture series was indeed a learning experience for me. The preparation for the session & interaction with the students during the session, helped me gain a better insight on the thoughts and perspectives of the generation that will lead our society forward to a more equitable one. Sessions of such nature not only help the students but also reminded me of student days and rekindled the youthful passion of hope and action which seemed to have got lost in my journey of professional growth within the system. I look forward for more such engagements with the students, preferably in person and in their environment of campus and hostels.

I wish to thank Ms Purnima Venkat and entire TAPMI team for providing me with a learning opportunity."

Sobins Kuriakose
National Head - State Operations,
National Skill Development Corporation





"It was a nice experience working with your students who came from diverse backgrounds. They showed genuine interest and organised many online interaction sessions to understand the Udupi saree revival project.They understood the situation and tried to find a solution. They also visited the weavers society, interacted with artisans and developed video to create awareness about the project. I hope this project helped the students to develop an interest in sustainable Handmade industries. I wish a bright future to them."

Mamatha Rai
President, Kadike Trust

"The seva project team allocated for me this academic year were really enthusiastic, involved & passionate. It was a good experience overall.

It's always a pleasure to be able to help the students, in anyway possible, to understand the workings of a small business such as mine."

Anusha Shetty
Founder Dolce Desserts



Given below is a tabular representation of the SEVA Projects in the past two years

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
1	NGO Communication	Understanding NGO communication with 3 case studies across NGOs in 3 different locations, understand fundraising strategies and success stories	working on a local NGO's fundraising and communication strategy, designing communication material and devising a communication plan	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Fundraising and Communication is integral part of any NGO. Proper communication strategies help in fundraising. fundraising is an important yet overlooked department in various NGOs. On this front we have searched and got information on various fundraising methods. After collaborating with TIP Sessions, we have realised that applying to various grants and competitions can be a viable option. Hence, we conducted research and created a common proposal to apply to grants and competitions. Furthermore, we created templates to keep a track of these and we also provided them information on some grants like Seed Fund Carbon Print						
2	Organic Store Management	Identification of organic stores, their certification, business strategy, market segmentation and penetration	Working with GoMatha Organics on better supply chain management and increased market reach	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
India's organic food market has been growing over the past few years due to increased interest for the perceived health benefits of certain organic products. The project aims to identify the key problems being faced by the organic food market in terms of promotion and distribution and solve some of the key issues faced by them. The main outcomes are Social Media marketing campaigns via Facebook and digital posters for the same, WhatsApp campaigns targeted towards an existing segment of customers and new local communities, Setting up a Seller account in Amazon to facilitate online purchase of store's products, An 8-minute video was made in collaboration with a Udupi based YouTube channel called Karavali People. The video gives a glimpse of 'GoMatha Organics' and showcases all their products to create awareness about the store and its products						
3	Natural Fibre Garments/ Khadi Retail Management	Working with natural fibre, khadi retail shops to understand marketing strategies, product diversification and sales strategies	Working with the Namma Shyli brand on better market penetration and marketing of products	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Namma Angadi sells Men and Women khadi fabric wear which is trendy, professional, casual but at the same time100% eco-friendly. the major problem faced was poor visibility of his store and thus low acknowledgment by potential customers. To increase visibility, we proposed to increase the product line to target students. Other solutions included digital marketing where we created social media pages on both Instagram and Facebook, created a website- Namma Shyli and activated a google Map link. Next, we suggested relationship marketing to enhance customers' shopping experience and paid advertising to increase market presence. According to customers suggestions we created a website.						
4	Green Campus	Ide tying campus spaces/ large owned spaces by institutions and identifying sustainability concerns, best practices and possible innovations, Mapping best practices in sustainability across campuses in India and the globe, mapping the current practices in TAPMI and earmarking areas of improvement for the future with budgets, CBA, timelines and possible impact	Working on making the TAPMI campus more sustainable from waste management, reduction of plastic usage and promoting more green practices	12	6 Months	SDG 13 - Climate Action Planet Centric
Green campus program enables schools and colleges to conserve natural resources like water and biodiversity, optimize energy efficiency, manage waste and educate about climate change and sustainability while addressing well-being of the students as compared to conventional educational institutes. we had to overcome the obstacle of finding solutions to make TAPMI a green campus without ever seeing the campus ourselves. This led to us coming up with ideas that were not suitable for the terrain, weather,and the space available in the campus. For instance, ideas like our solar bench had to be rejected due to these factors as well as it not being as cost effective as we had hoped. However,we were able to connect with our seniors who have had visited and lived on campus as well as faculty that have taught in the campus to learn about the shortcomings in TAPMIs' campus.We were able to identify that the sanitary napkin disposal machine was not installed in the campus, and we also learnt the presence of a large numberof plastic bags and newspapers in campus. After taking to the faculty, we were also able to learn the safety hazards at nighttime due to snakes in the campus and accommodated changes to our earth hour solutions accordingly.						

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
5	Campus/ apartment water harvesting solutions	Identifying best practices in water conservation in campus, large institution grounds with a specific focus on rain water harvesting, business plans and costs for the same	Working on TAPMI campus water harvesting plans, follow up on existing plans, next steps and hurdles.	12	6 Months	SDG 13 - Climate Action Planet Centric
Students investigated and recommended the most feasible solution for rainwater harvesting. Primary investigation revolved around the existing methods of water harvesting and saving, including the rooftop channelization, condition of borewells, groundwater recharge by soak pits and sewage treatment plants. Students come up with 3 techniques that can be implemented to enhance the rainwater harvesting capacity of TAPMI.1. Reducing Rooftop clogging. 2. Rainwater Harvesting through a collection of Rooftop water.3. Barrage Technique. Data analysis showed that one could increase water savings by 75%. Students also performed conservative calculations to arrive at the estimated cost that would be incurred to construct such a setup in the institute						
6	Individual SHG/NGO Handloom products small scale business- focus on digital marketing	Working with small scale producers/ NGOs/ SHGs producing fabric, cloth and textiles for sale with a specific focus on quality, sizes, product diversification etc - studying FabIndia etc	Working with clients such as NammaAngadi textile producers to achieve better market reach and penetration	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
The inability of the organisation to communicate about their product as well as their motives is proving to be a major weakness that will hinder company from scaling up sales to significantlyWe discovered that it is always preferable to investigate the root cause of a problem. We discovered the root cause by simply asking pertinent questions.One of the major root causes for this is the almost negligible digital presence. The company does not have an authentic website After determining the root cause, we needed to consider the possible outcomes, which we did.We had to come up with solutions while keeping in mind the problem statement, which was the optimization and diversification of bio-products. We also came across an incredibly critical and unresolved packaging issue that was not sustainable along with this key problem argument.Increased traffic to their website, increased visibility and scope, higher transaction conversion rates, and packaging and logistics outsourcing so Namma Angadi can concentrate on building goods based on customer insights are all expected outcomes of our efforts.						
7	Management of e waste	Understanding the management of e-waste, best practices and impact on environment	Applying national sector level learnings to the e-waste management needs of Udupi district	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
One of the major issues that were identified was the lack of awareness regarding E-waste, which turned out to be the same for our Udupi client, SLRM. General mass, in and around Udupi, does not have the clarity regarding E-waste or how to dispose of them at the end of their lifecycle. To address the issue of awareness in the E-waste sector, created informational videos, storyline videos, and posters to engage the audience. In addition to videos and posters, we created a quiz competition on the Basics of E-waste Management. All these will be launched by SLRM and SAAHAS on their social media handles. With digitalization and the growing adoption of automation, E-waste generation will increase exponentially						
8	Thermocol Waste	Working on understanding the depth of the ocean plastic waste management, principle polluters, impact on economy and ecology and best practices	Understanding the unsustainable beach practices in Udupi area and looking at solutions for ocean plastic waste especially thermocol for fishing purposes.	12	6 Months	SDG 13 - Climate Action Planet & Profit Centric
This project focuses on working with APD to come up with a solution for thermocol waste management in the Udupi district. The goal of our project was to reduce Ocean thermocol waste by using a 100% Biodegradable alternative, effective thermocol degradation,and transport.Three possible ways to recycle old thermocol and the availability of substitutes were identified.1.Usage of Acetone: Thermocol collapses when exposed to acetone solution, with optimumuse 97% volume reduction is achievable.2Therminator: Reduces thermocol to 80%of its volume using heat, pressure & gravity.3Usage of FloraFoam: Florafoam is a 100% Biodegradable substitute for EPS						
9	Local dairy co-operative	Working with the local dairy cooperative on better product packaging, understanding their marketing and sales strategies and quality checks	Working with the DKMUL group on product packaging, better market penetration and marketing strategies	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
Around the world, plastic waste is generated in large quantities and is leading to land pollution as plastic is not a biodegradable material. The Dairy packaging industry generates tons of plastic waste.Working with the local dairy cooperative on better product packaging of milk and dairy products (paneer, curd), conducting quality checks of sustainable packaging material and proposing a value proposition. Some of the solutions are Glass Bottles are good option for milk packaging, For paneer packaging Cellulose Paper boxes, Ecoware (Crop Fiber) for curd packaging.						
10	Conservation of Heritage and buildings and structures	Working with designated conservationists and organisations working on heritage buildings or traditional building conservation- focus on issues, funding, opportunities for business etc	Understanding the impact of the COVID pandemic on the Manipal Heritage Village, its future marketing strategy, means to attract new faces and retaining staff in the near future.	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Heritage buildings and structures in India face numerous challenges related to conservation and maintenance. The project is conducted to address these problems faced by heritage sites. The main outcome is Redesigning the entrance was the need of the hour and had to be done as soon as possible. Offline and online promotions must be implemented to increase the awareness of the site and attract crowds. A future roadmap like creating a virtual tour of the site was also outlined. Finally, these recommendations and solutions to the issues were communicated to the stakeholders of Heritage Village						
11	Eco-friendly Gifting Options	Working with retail stores working on eco-friendly gifting solutions with branding and marketing as well as management of supply chain	Communications project on promotion of CraftsMantra store and eco-friendly gifting ideas as well as supply chain management	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
The project is meant to emphasize eco-friendly gifting as an innovative and sustainable gifting option and promotion of a company named "Crafts Mantra", an eco-friendly gifting company through its online and offline presence. we narrowed down on creating a product catalog for Crafts Mantra. This catalog can be shared with the customers by sharing just the barcode. The customer on scanning the bar code can browse through all the products from the comfort of their home. Additionally, we also, increased the Instagram followers for Crafts Mantra by 100 on Instagram. The catalog showcase products like handicrafts, pottery, décor, cloth bags etc.The e-catalog provides address, contact details, and Facebook handles for any inquiries and product updates. It describes the purpose of the Crafts Mantra. It also features details of the founder, photographs of products, and a brief description of the meet with the ex-CM of Karnataka.						
12	Pet sales management	Understanding the informal pet/ animal sale market in India, market ethics, required registrations, management of business, marketing and sales strategies as well as follow ups	Working on creating a DPR about the pet culture/ industry in Udupi/ Manipal - their business strategy, ethics and issues	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
To first understand the Pet Care Industry on a national level, a national level study was conducted, the primary sources of data collection included the cities, Bangalore and Delhi. In these cities, Pet Store Owners and Pet Parents were directly contacted. Questions related to Documentation/licensing of pet animals for sale. Through this primary research, we were able to identify key issues that are present in the pet sales industry. This included the selling of undocumented pets at lower prices, sometimes at 50% the rate of documented pets. To overcome this issue, Students created a toolkit consisting of a guide to adopt stray animals, vaccination schedules, how to report animal cruelty along with several other topics. Along with this 'Save the Strays' was an awareness campaign that was conducted on 7th March to help raise						
13	Handloom Sari Solutions	Identifying handloom sari industries in the local region, understanding their business from issues to best practices and business plans	Running a media campaign for Udupi Sari and working on the HRM issues, understanding policy level implications and available schemes for the same	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
KadikeTrust was established in 2018 and works in association with the Tallipady weaver's society. It aims to increase the number of weavers and to create better market for the Udupi sarees. The aim of the project is to revive the art of Udupi sarees and increase the customer base through improved trade channels and marketing activities. The main outcomes are Creating an e-commerce website using GoDaddy.com. Draping the sarees on mannequins for a						

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
better portray of design. Integrating multiple social media handles on the website for increasing traffic. Adding blogs and Youtube videos to create a brand value of Udupi sarees and promoting the handloom industry too. SEO for increasing organic searches.						
14	Fruit Agri Produce value chain optimization	Identifying specific fruits grown in the local area, understanding the value chain, secondary product innovations and focus on preservation and market reach	Working with the pineapple growers' association to understand the current issues, supply chain problems and next steps for better market penetration	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Soans Farm, located in Moodbidri, Karnataka, is a leading producer of pineapples and its by-products in that area. They are the sole producer of Kew pineapples in Udupi, a variety with high juice content.uring the stint of our project. Through a research data, we could see that consumers are heavily dependent on the internet for information. So, our group suggested the client to make a website of Soans Farm, for the customers to get to learn more about the products and services. Also, by acquiring legitimate food licenses and other accreditations along with devising a solution for a lean supply chain, Soans Farm has the potential to venture into Online Grocery and Food Delivery services.						
15	Data Management of waste	Understanding the practices of national level bulk generators, their guidelines and issues and innovations at the policy and industry level to deal with bulk waste	Working on creation of an updated toolkit with information about bulk generators, their schemes and regulations and innovations in management of waste - bulk generators include - schools, apartments, wedding venues etc	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
Managing the Data that is associated with the collection and processing of waste is an important step in the identification of methods that can be implemented to incrementally improve the waste management process across the country. After analysing the types of waste generated in apartment complexes, we proposed the following for the treatment for wet waste – the floating-drum biogas plant, which is easy to install, operate and is less prone to leakages. We also proposed creating a composting plant that is easy and cost-effective to set up and helps generate a small income to the apartment through the sale of the resulting compost to nurseries. We have also proposed making green apartments by using compost to create and maintain green areas.						
16	Coastal Preservation Projects	Understanding the current pollutant and conservational practices at coastal belts in India, impact on industries and economy and best practices	Study on current practices with regard to conservation in coastal areas in Udupi/ Kundapura region - TIP NGO	12	6 Months	SDG 13 - Climate Action Planet & Profit Centric
The purpose of the project is to study the current pollution and conservational practices along the coastline of India and utilize this to empirically map out the ecological issues in specific zones of the coastline in Karnataka, specifically the Udupi district. There are various sources of pollution- the most common of them being municipal and industrial wastes. Due to the lack of proper treatment facilities and improper pollution control systems, industrial pollution has been increasing. Some solutions which have been introduced are Creating more marine protected areas, Stopping trawling, Avoiding juvenile fishing, Reducing ocean plastic pollution, etc.						
17	Dairy Produce small scale industry	Working with small scale dairy farmers on product storage, issues of quality and product diversification	Working with Selco dairy farmers to understand specific issues, product diversification possibilities and working on the milking machine solution	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
There was a great need to develop customer sentiment among farmers for SELCO's solar milking machine as there wasn't enough visibility for the product in the milking machine market. The main recommendations given by us are Segmentation, Targeting and Positioning to help the marketing team refine their final selection of a potential pool of customers. This can increase their efficiency by targeting customers based on their needs and benefits. Actively approaching customers for feedback using the feedback form to help understand consumer behavior and acceptability towards the product. Customers will be more likely to recommend SELCO's solar milking machine to other customers if they feel more valued and thus the company can increase its brand visibility as well through word-of-mouth marketing also						

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
18	Organic Nursery business optimization	Understanding the businesses of organic nurseries, business models and post-COVID era issues	Working with local organic nurseries on better sales, marketing and supply chain issues along with certification	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
The project is dedicated to the development of organic nursery business in the current pandemic scenario. Some of the actions which has been taken is Routing traffic to her existing Facebook pages from all the additional social media platforms possible, Circulated Video in the Kannada Language for awareness regarding organic produce, and gaining traffic by posting that video on all social media tapping her Facebook page. Hereby routing traffic ultimately to that page, Circulated posters of Udupi Organic Nursery (English) through LinkedIn and again used it to route traffic of local people to her page (geography limited up to Udupi Only), Circulation of 4000 pamphlets in Udayavani Newspaper within Udupi local area. The purpose is to increase the footfalls in the nursery. We have taken permission from our client specifically to ask her whether she is comfortable seeing her number on these pamphlets.						
19	Product Awareness Catalogue-Makers Catalogue	Working with local artisans, artisan collectives in handloom/ cottage industry rich areas to understand combined market connects for corporate gifting, better quality control and e-commerce conversions	Working with the local producers at the Udupi/ Manipal region for corporate connects for makers, quality control, supply chain management etc.	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Handicrafts and handlooms are an important part of the unorganized sector of our country's economy. This sector has been suffering due to constraints like poor exposure to the latest technologies, being unorganized, having low capital investments, and poor institutional frameworks. The best way to uplift the artisans is to come up with a solution wherein the individual artisans can help each other and work towards achieving a common goal. A cooperative society is one of the best ways. Another solution is marketing and promotion by word of mouth and by online promotion.						
20	Waste upcycling produce	Identifying NGOs/ companies that are working on product-making from waste, upcycling projects and management of their sale -understanding types of products and marketing/ sales strategies	Working on product identification from waste, identification of training material and trainers as well as creation of business strategy	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
This SEVA project pertains to helping an NGO called "TIPS Session" on issues concerning "Waste Upcycling", specifically Circular Economy and Climate Action. To alleviate issues related to waste management in Udupi, we researched Indore model to gather pointers on the reasons of its immense success. We also worked parallelly to create campaigns like "Trash Talk", "Worshipping Waste", "The Red Carpet", "Lights, Camera, Action", "Paryavaran Protectees", "Parting Gift –A bag of waste", "Pancha Bhoota" among othersto attract locals to make them understand the importance of waste segregation. We also created an SOP which lays down step wise guidelines on waste segregation and collection.						
21	Sewage water treatment for small scale eateries	Understanding the issues of waste water management in small scale eateries in urban/ rural locations, legal requirements, impact on economy/ environment, innovations and costs for the same	Continuing the study at the Manipal level, identifying the impact on the environment and preparing a DPR for submission to the ZP CEO	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
Water scarcity is a major concern for most parts of the world and government. It has reached a level where two-third of the world population faces severe shortage for at least one month every year. The primary objective was to offer affordable and feasible solutions for the problem of wastewater management for small-scale eateries and analyze factors for the adoption of solutions. The solutions are septic Tank To mitigate the risks surrounding groundwater contamination and environmental degradation, the introduction of septic tanks is the right way forward. Another solution is Educating the mass about sustainable practices to reduce wastewater generation at the source must be an integral part of the change process. Training the workforce about methods for segregated disposal of wastes and proper disposal of the same at municipal corporation designated dumpsites. On-spot training to vendors on best practices for waste disposal and steps to reduce oil spillage and solid particle contamination.						

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22	Career counselling for vulnerable children	Identifying career counselling services for vulnerable communities and for blue collar jobs, market oriented trainings, market linkages and soft skill trainings	Working with local tribal communities on career counselling, finding blue collar job management systems, system for daily wage jobs, suggesting means to make these systems more optimized, identifying necessary career counselling sessions, conducting/ facilitating sessions with youth etc	12	6 Months	SDG 10 - Reduced Inequalities People & Profit Centric
In this project, we successfully were able to reach 110+ families and influenced them towards skill development by making them understand the importance of upliftment. As a part of the awareness drive, we have conducted career counseling and skill development sessions with the help of BVT and RUDSET, both being non-profit and non-governmental organizations. The people who attended the session were enthusiastic and filled with motivation to upskill themselves. Finding new stakeholders and other related upliftment activities enabled us to reach out to a wide range of communities and motivate them. Through these new initiatives, we were able to engage effectively with the community, who previously were reluctant to even respond to basic queries. Our donation of the sewing machines has rejuvenated the girls of Makkala Mane to pursue their liking for Sewing and stitching. Along with it, it has provided a platform to earn a source of income from it						
23	Basket weavers' projects	Working with basket weavers using different fibres and understanding their labour/ market penetration and product diversification issues	Working with local basket weavers for better addressing market issues and labour problems as well as training issues.	12	6 Months	SDG 10 - Reduced Inequalities People & Profit Centric
The basket weaving industry is an unorganized sector. This leads to the obstacle of not earning high revenues in this industry. Around 15%-20% of the people in the Kundapura region are basket weavers. Among them is the Koraga community, which resides in the Manipal region. They are facing problems like lack of motivation, limited market visibility, lack of raw material available. The solutions which have been considered are Business tie-up with Annamayil Koodai, Chennai, With the help of Cooperative society increase market penetration, structured financial entry, Encouraging the basket weavers to take this as a full-time profession.						
24	Rural Tourism Project	Working on rural tourism projects, identifying companies that promote/ organise sustainable rural tours, their business models, focus on marketing etc	Working with the Udupi Tourism circuits on promotion of sustainable rural tourism practices	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
After all the stakeholders agree with the packages, we plan to market this to the general public for awareness. We will present our proposal to Udupi administration so that they can incorporate our webpage into their website. This step, we believe, will definitely start an inflow of tourists in Udupi who would love to enjoy the rural life during their vacation.d. We plan to strengthen the packages devised based on the large-scale data that we will receive from Mr. Amith since he is our POC for the Udupi Tourism Department. e. We plan to create Instagram and Facebook pages for Mr. Amith so that he can collaborate with other rural tourism players in the market and as well as with the customers and spread awareness about the same. It was a great learning experience for each and every member of the team and interacting with our client to know more about the project and scope for rural tourism, was a delight. We planned to come up with a website that can help us convey our idea better in a pictorial way along with a presentation that could help our client have a better idea of the plan. The website speaks a lot about our tour packages and was a part of our plan to nudge the idea of possibly displaying those tour packages on the website of Udupi tourism. The website further paves way for a lot of other regions to be included in the plan with time.The solution was conveyed to the client through the final deck and his valuable insights were incorporated into the solution as well to make the solution more impactful.						
25	Agri-tourism Project	Working on agri tourism projects, identifying companies that promote/ organise sustainable rural tours, their business models, focus on marketing, customer involvement and sharing of resources model etc	Working with the Udupi Tourism circuits on promotion of sustainable agri tourism practices	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
The Government of Karnataka wanted to introduce agritourism in a phased manner over the course of the five years, with the goal of encouraging sustainable tourism and skill development and training.Students started off with studying the Agritourism model in the four states – Tamilnadu, Kerala, Maharashtra, and West Bengal and later on extended to finding the issues faced in Karnataka in terms of the agritourism model. After a lot of research and meetings with various founders of Agritourism farms, the solution addressing these two issues were concluded to be: • Creating a brochure or video that aims at increasing awareness about Agritourism. The content we believe will encourage more people to set up agritourism centers with the state and view it as a profitable prospect • As the Karnataka State Tourism doesn't have a fixed model in place we customized successful agritourism from Maharashtra to certain regions of Karnataka and mapped out the eligibility, benefits and possible challenges of setting up that model in that area						
26	Wet Waste Management	Working on wet management at the GP/Municipality/ MC level with focus on scale of the problem, innovations in the field, business plans to implement innovations, cost structures and feasibility and promotion of home composting	Working on the wet waste/ resource management issue in the Udupi/ Manipal area, focus on replicability of innovations and business plans for the same and on creating a plan to promote home composting	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
In a bid to figure out an efficient, cost-effective, and sustainable way to process wet waste and promote the usage of compost within the Manipal, Udupi region; the group carried out an extensive research pan-India with the help of all the stakeholders involved to identify similar models that have been successfully implemented. The main problem which was facing was, reluctance from farmers to purchase and use the compost, Lesser consumption compared to the production of compost, and high maintenance cost for storage of compost. The main ideas for marketing the organic compost given to farmers and domestic buyers are Distribution of pamphlets and user manuals, Digital sensitization as well as door-to-door awareness drive, Information sessions from field experts, Appropriate packaging and distribution solutions.						
27	Clean energy livelihoods solutions	Working with institutions promoting clean energy livelihood solutions including solar, hydel/biogas etc, working on business plans for the same, training, market connects and impact on the environment	Working with SELCO sugarcane juicers and saloon trimmers to take the clean energy livelihood initiatives' forward - better business plans, better marketing and training	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
SELCO is a social enterprise providing sustainable solutions and services to underserved households and businesses. We found out the problem; marketing strategy for more penetration of solar sugarcane juicer and integrated solar salon in rural market and also find a way to educate the rural people about the product. We targeted customers, Banks and vendors and tried to achieve the solution for the problem. We came up with ideas for solutions like the distribution of pamphlets to rural people in the local language, making short testimonial clips of the customer feedback to more publicity of the product, and highlighting the financial help point so that more customers are attracted. We created pamphlets and promotional videos to increase customer reach and thereby helping in the optimization of business plan						
28	Beach tourism project	Understanding beach tourism, sustainable practices, issues and challenges and laying special focus on construction of temporary structures on beaches	Working on Udupi beachline with sustainable choices, better temporary structures, increasing footfalls but management of waste etc	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
Tourism is the largest and fastest-growing sector in the world. It contributes 11 percent to the country's GDP and employs approximately 200 million people. The main objective of this project is to increase the tourist footfall at Malpe Beach.We have identified few problems such as waste littering which includes glass bottles, worn-out fishing nets, plastic waste, and high sewage contamination from local communities. We have found that the street vendors and hawkers are using non-biodegradable cutleries. There is also an inadequate number of changing rooms available on the beach.We proposed the use of semi-portable polyester tents and bamboo-based permanent changing rooms to address the issue of changing rooms at Malpe Beach. We looked for biodegradable cutlery made from easily available and inexpensive materials such as Sal leaves, recycled paper, banana leaves, and edible cutlery made from rice, wheat and millet, to fully replace plastic cutlery. For effectivewaste management, we figured Glass bottle recycling techniques and the use of IoT-based smart bins. Also, proposed an easy way of converting fish nets into grocery tote bags to reuse them						

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
29	Vegetable Agri Produce value chain optimization	Identifying specific vegetables grown in the local area, understanding the value chain, secondary product innovations and focus on preservation and market reach	Working with the Mattu Gulla Group on product diversification, increasing market reach, finding larger markets and better storage for produce	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Mattugullais a variety of green brinjal grown in and around the village of Mattu in Udupi. We come to know that there is a mismatch between the supply and demand of Mattugulla. Among many alternatives to counter this issue, we chose to go ahead with the cold storage facility for extending the shelf life of Mattugulla. This would have multiple positive effects on the Association and the farmers –supply of Mattugulla can be stabilized, Average prices will increase, and will also incentivize the growth of Mattugulla. We also investigate more effective ways of sun-drying Mattugulla and found that using the right equipment, it can be done within 7-8 hours.						
30	Handloom Saris Mahalasa	Identifying handloom sari industries in the local region, understanding their business from issues to best practices and business plans - especially from a Handloom Sari Start-up perspectives with local boutiques and retailers	Working with a start up/ entrepreneur to set up the Handloom sari sale business strategy, creation of business plan, communication material etc	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
The project brought to our notice that the section of the society that preserves the rich culture and heritage of our country is highly neglected and undermined in the era of capitalism and mass production. After conducting research in order to solve these problems, we came with some constructive solutions. Which are Including more and more geographical locations in the supply chain by creating more sales channels so that authentic handloom sarees can have a broader reach. Awareness needs to be created among the youngsters by using social media platforms extensively regarding the importance of handloom products and the need for their revival. The challenges faced due to low production capacity can be tackled by tying up with weaver communities and including them in the supply chain. Intervention by young entrepreneurs by attempting to modernize the techniques of production and also the industry as a whole, while keeping its authenticity intact.						
31	Flower Agri Produce value chain optimization	Identifying specific flowers grown in the local area, understanding the value chain, secondary product innovations and focus on preservation and market reach	Working with the Udupi Mallige & Shevanthigge growers' associations, focus on further market reach and better price for the product, focus also on the GI tagging procedures	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
The project aims at providing recommendations in optimizing the Floriculture value chain among specific farming communities and its related stakeholders.The primary research included interactions with farmers, stakeholders and clients in an attempt to understand the ground reality of the floriculture community at Udupi. The secondary research techniques focused more on the existing Government policies, identifying the pertinent issues and its impact on this industry.Certain bottlenecks such as low shelf life of the flowers, seasonality of demand and inadequate awareness about the Government schemes and subsidies were also identified. Based on these issues, some possible solutions were framed Easier access to information regarding Government policies as well as the latest farming techniques would focus on the volume of the produce. Similarly, exploring into new geographical markets and finding out non-conventional uses of flowers would increase its value to a large extent. The challenges faced were mostly in the form of lack of timely information and transparency in the existing supply chain network. The demand of the flowers being highly seasonal also acted as a drawback in the growth of this industry because it directly affected the prices						
32	Sustainable packaging project	Understanding the sustainable packaging industry, costing and logistic issues and product utility	Applying sustainable packaging solutions with end-to-end processes for Nammaangadi	12	6 Months	SDG 9 - Industry, Innovation and Infrastructure People and Profit Centric
Nammangadi, provides a platform to display the skills of local artisans and children from Kundapura. They focus on a wide variety of products including apparel with the latest designs, hand-made jewelry, home decor, and local food items. The purpose of this SEVA project was to help Namma Angadi identify better, economical, and more sustainable packaging solutions for their honey bottles than they currently deploy. After conducting research at the national						

SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
level, potential sustainable packaging suppliers were identified and contacted to identify which among them could provide Namma Angadi with economical, effective, and sustainable solutions. Packaging solutions for single and multiple bottle shipping was designed with the proper cushioning to handle the fragile items						
33	SHG products - home based products edible	Working on the business plans, quality control and hygiene and production issues with local SHG/ NGO food products such as pickles, jams, chutneys, papads etc - Understanding cases such as Lijjat Papad etc in detail	Working with 3 different institutions (one group each) to understand quality control issues, better market reach and possible branding for the same	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
Our Seva project was to work with an SHG based on home-based edible products. We studied SHGs and government initiatives to understand the steps taken to improve the business and livelihoods of members associated with SHGs. We used social media marketing to assist 2 entrepreneurs who had limited reach. Social media marketing combined with word of mouth would help generate leads, more queries about the product offerings, and increased awareness about said offerings.						
34	Water body management and Optimization	Management of urban water bodies (lakes, reservoirs/rivers) etc - pollution management, tourism management and involvement of civil society	Working on the Mannapalla lake project on sustainable development, and involvement of civil society	12	6 Months	SDG 13 - Climate Action Planet & Profit Centric
Our SEVA project was aimed at water body management and optimization of the Mannapalla Lake (Manipal Lake).the quality of the water due to the large area of the lake as well as frequent visits by the locals has led it to deteriorate. Currently, the lake also faces a security concern because of the lack of an external boundary outside its perimeter. This creates an issue for the management for effective management of the lake and leaves no source of revenue generation. The mai outcomes are Stabilization of ecosystem, Commercialization by beautification,Attract more migratory birds ,Heaven for fauna, Groundwater recharge.						

“The principle of common but differentiated responsibilities is the bedrock of our enterprise for a sustainable world”

By **Indian Prime Minister of India Narendra Modi**



SR NO	SEVA PROJECT	NATIONAL LEVEL SCOPE	UDUPI SECTOR SCOPE	No.of Students	Time	SDG MAPPING
35	Artisanal training schools	Working with institutions and training schools that work with rural/ urban artisans with training, product development and market reach support - helping in business acumen training, better product-market connect etc.	Working with the C E Kamath on revamping of training material to include business training in course material and identifying future markets in post-COVID Era	12	6 Months	SDG 8 - Decent Work & Economic Growth People & Profit Centric
The project set out to address the barriers faced by the organization in creating brand awareness and targeting markets. The institute despite being in the business for several years struggles with outreach and brand visibility. In-depth data collection from different sources and surveys were conducted to identify the cause of low visibility and outreach. Additionally, a national-level study about different artisanal institutes such as Vadodara Central Jail, Tailor Tutor School across India was conducted to understand how training institutes function and apply those learnings to the Manipal level project. Technological adaptations such as ERP systems will help the organization in better operational functioning. Better engagement on social media platforms such as Facebook and Instagram will leverage in creating awareness about the institute. Cross-selling through tie-ups and improving distribution networks are few other steps in the direction.						
36	Domestic Hazardous waste management	Working on domestic hazardous waste management at the GP/Municipality/ MC level with focus on scale of the problem, innovations in the field, business plans to implement innovations, cost structures and feasibility	Working on the domestic hazardous waste / resource management issue in the Udupi/ Manipal area, focus on replicability of innovations and business plans for the same	12	6 Months	SDG 11 - Sustainable Cities & Communities Planet & People Centric
We started off with gaining more info on the subject matter, i.e., domestic hazardous waste management, in other regions of the country. The issues were – Lack of awareness among the residents regarding segregation of hazardous waste and High prices charged by the existing incinerator companies. Saahas the non-government organization has taken many initiatives before in regards to waste management. And this project gave us an opportunity to work in collaboration with Saahas and come up with solutions for the existing problems, thereby helping society. We conducted a webinar for the Udupi locals where 2 schools also joined us and helped us in spreading the message across. We also prepared posters, instruction manuals etc., and circulated them via social media like WhatsApp, Instagram etc. For the incinerator cost problem, we proposed that the company should either set up its own incinerator, looking from long-term perspective, or it can outsource the incineration process to some company outside the region.						



A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Linking small scale producer with online platforms	Studying the phenomenon on cluster development in districts and states where local products have been linked to a single online platform	Understanding the product awareness catalogue producers' requirement and linking them with the eSamudaaya's platform	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Island Tourism Project	Understanding the issues faced by island resorts, their promotion and studying their market strategies	Working with the SOANS Team to better promote their resort and conducting a media campaign for better outreach	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Handloom and sustainable fabric project	Looking at khadi/handloom stores at the national level - their brand management, their marketing strategies and studying their successes	Running a marketing campaign for the handloom store and helping him increase his sales	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months
Pet Sales Project	Looking at the rescue-adoption industry and the pet sales industry and understand the best practices in the industry	Working with pet rescuers and understanding their issues, arranging for awareness drives amongst students to better care for strays and animals in emergency and other situations	15 - LIFE ON LAND	12	6 Months
Impact of Pandemic Study	Looking at the impact at the national level and at selected states/ districts	Impact of the pandemic on the lives of children - including child health, education, safety and security in Karnataka (districts to be mentioned)	10 - REDUCED INEQUALITIES	12	6 Months
Community based WASH project modelling	Understanding community based WASH Models in rural India - studying what has worked an what have been the best practices	To develop strategy for community-based sustainable models of WASH – Water, Sanitation and Hygiene	6 - CLEAN WATER AND SANITATION	12	6 Months
Female Menstrual Waste Management	Understanding the female menstrual waste management in district across India - methods of waste collection and sustainability efforts	Conducting awareness drives about better menstrual hygiene practices across locations and segments with sustainable management options	3 - GOOD HEALTH AND WELLBEING	12	6 Months
Earth-friendly travel and workshop promotion project	Understanding eco-friendly travels and their go-to-markets strategies	Working with JwM to better promote their systems thinking workshops and eco-friendly travels	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
MNREGA Implementation study	Assessment of the implementation of the MGNREGA Scheme in selected states and districts	Assessment of the implementation of the MGNREGA Scheme in Udupi and other districts	10 - REDUCED INEQUALITIES	12	6 Months
Vegetable Agri-produce promotion project	Understanding the market of vegetable produce and the next steps to creating better products for the urban market - successes with types of vegetables and failures	Working with the WGSHA Culinary school to help find value added products for the brinjal product and designing the go-to-market strategy	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months
Sustainable lifestyle - An Introduction	Understanding sustainable lifestyle models across India - simple solutions to things that work and the role that citizens can play	Conducting workshops and activities to train people and start a dialogue on sustainable lifestyles	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months

A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Bio-technology Start-up Project	Understanding the market for bio-technologies, the challenges faced by them and the market strategies for the same - study at least 3 such technologies and understand their specific concerns	Helping Blackfrog Technologies get wider market reach and promote their product better	9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE	12	6 Months
Tourism Vision Documentation Analysis	Studying vision documents on tourism departments in selected cities/ districts and states and identifying best practices	Updating the vision document of the Udupi district on UDUPI Tourism	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Organic Store Management	Looking at organic stores at the national level - their brand management, their marketing strategies and studying their successes	Helping the local organic store to better sell its products and increase customer awareness - creating and running the marketing strategy for the company	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Promotion of women owned enterprise project	Looking at the homebased food markets which have reasonable local presence and to the go-to-market strategies that have worked well for. Enlisting the main strategies that have worked well, especially during the pandemic and the branding and marketing tips that have worked well for them	Looking at Lona's business and its current state, the next few steps on how to take it forward, setting up a marketing plan and implementing the same through social media marketing and publicity	5 - GENDER EQUALITY	12	6 Months
Single Use Plastic Alternatives	Studying alternatives to single use plastic for small shops and their business impact along with a plans for sourcing and management	Proposing relevant models to small shops for single plastic ban and what substitutes that can be used	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Promotion of women owned enterprise project	Looking at small scale bakery businesses and their go-to-market strategies - enlisting what has worked well and what has enabled them to reach larger markets	Working with Anusha Shetty to understand her business better, looking at better marketing strategies for her bakery - actively running the marketing strategy	5 - GENDER EQUALITY	12	6 Months
SCOT Store Project	Understanding sustainable stores, zero waste stores, their markets and products and their best practices	Working on conducting a market research study on what to keep in the SCOT Store and suggesting next steps for the store	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months
Construction Waste Project	Handling of the construction waste	Handling of the construction waste in Mangalore/ Udupi region	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Promotion of handloom sari and market survey project	Looking at promotion of handloom saris at the national level by individual entrepreneurs, their strategies and successes	Looking at conducting a market research study to understand the popularity of handloom saris, especially the Udupi sari - actively conducting the study and presenting the findings	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months

A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Eco-friendly gifting store project	Understanding ecofriendly gifting across India - there connect with local artisans, personalization and go to market strategy	Understanding the specific issues of Crafts Mantra and helping them with the publicity of their goods and their offerings.	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Children's Library and Upcycled Project Promotion	Working with small children's libraries and trying to understand their promotions skills and strategies and understanding how to better promote reading habits	Working on product profiling and promotion for the Purple Space Library	4 - QUALITY EDUCATION	12	6 Months
Home-made SHG products sale	Understanding the ways in which SHG created products are sold, models that have worked well and replicable elements in their work	Working with the Navodaya SHG groups to understand their products and their go-to-market strategies, providing and implementing solutions	5 - GENDER EQUALITY	12	6 Months
Beach Tourism Project	To create a detailed project report on the current sustainability practices of the Udupi District tourism initiatives. For the national level, we need you to identify other regions that are working on sustainable tourism and document best practices for the same.	Creating a comprehensive plan for the Malpe/ Padukere beach development	13 - CLIMATE ACTION	12	6 Months
Nursery Management	Looking at ornamental and farmer based nurseries and their go-to-market strategies	Understanding the project requirement of the last year's project and taking up the needs of the entrepreneur this year - enabling them to use the suggestions and solutions	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Promotion of vernacular construction project	Working towards a better understanding of vernacular construction promotion in India - the strategies that worked well - studying business doing the same	Helping the entrepreneur develop a market strategy to promote vernacular construction	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Rural Artisan Training Project	Understanding rural youth artisan training initiatives better and studying best practices	Conducting business and social media marketing training for students of CEKIA	10 - REDUCED INEQUALITIES	12	6 Months
Vision for aspirational districts	To develop a profile of 7-8 Aspirational Districts identified by NITI Aayog and to develop a vision for the District using specific key indicators of development	To develop scalable local solutions for rural communities that promote dignity and prosperity. A community-driven, long-term empowerment concept for rural India. These rural development programmes equip women and youth with the knowledge and skills they need to make educated decisions that will help them escape poverty and embrace wealth	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Zero-waste farm to customer promotion project	Understanding farm to market strategies by start-ups, their challenges and successes - studying at least 3 such initiatives	Helping Farmazzy get wider market reach and promote their service better	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months

A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Eco-friendly gifting store project	Understanding ecofriendly gifting across India - there connect with local artisans, personalization and go to market strategy	Understanding the specific issues of Crafts Mantra and helping them with the publicity of their goods and their offerings.	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Children's Library and Upcycled Project Promotion	Working with small children's libraries and trying to understand their promotions skills and strategies and understanding how to better promote reading habits	Working on product profiling and promotion for the Purple Space Library	4 - QUALITY EDUCATION	12	6 Months
Home-made SHG products sale	Understanding the ways in which SHG created products are sold, models that have worked well and replicable elements in their work	Working with the Navodaya SHG groups to understand their products and their go-to-market strategies, providing and implementing solutions	5 - GENDER EQUALITY	12	6 Months
Beach Tourism Project	To create a detailed project report on the current sustainability practices of the Udupi District tourism initiatives. For the national level, we need you to identify other regions that are working on sustainable tourism and document best practices for the same.	Creating a comprehensive plan for the Malpe/ Padukere beach development	13 - CLIMATE ACTION	12	6 Months
Nursery Management	Looking at ornamental and farmer based nurseries and their go-to-market strategies	Understanding the project requirement of the last year's project and taking up the needs of the entrepreneur this year - enabling them to use the suggestions and solutions	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Promotion of vernacular construction project	Working towards a better understanding of vernacular construction promotion in India - the strategies that worked well - studying business doing the same	Helping the entrepreneur develop a market strategy to promote vernacular construction	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Rural Artisan Training Project	Understanding rural youth artisan training initiatives better and studying best practices	Conducting business and social media marketing training for students of CEKIA	10 - REDUCED INEQUALITIES	12	6 Months
Vision for aspirational districts	To develop a profile of 7-8 Aspirational Districts identified by NITI Aayog and to develop a vision for the District using specific key indicators of development	To develop scalable local solutions for rural communities that promote dignity and prosperity. A community-driven, long-term empowerment concept for rural India. These rural development programmes equip women and youth with the knowledge and skills they need to make educated decisions that will help them escape poverty and embrace wealth	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Zero-waste farm to customer promotion project	Understanding farm to market strategies by start-ups, their challenges and successes - studying at least 3 such initiatives	Helping Farmazzy get wider market reach and promote their service better	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months

A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Waste Management Decentralization Study	Case study of decentralised waste management in selected cities and highlighting the importance of SHGs and creating an impact report	Case study of decentralised waste management in Udupi city and highlighting the importance of SHGs and creating an impact report	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Blue Flag Beach Analysis	Understanding blue flag beaches across India and the role of civil society on maintenance for such beaches along with their commercialization	Studying the blue flag beach in Padubidri and the steps taken to manage the beach and how civil society can be engaged for the same	13 - CLIMATE ACTION	12	6 Months
Social Media Analysis	Studying social media strategies run by NGOs in at least 3 different locations	Handling of social media of the APDM NGO and reflect the work on the ground	17 - PARTNERSHIPS FOR THE GOALS	12	6 Months
Restoration of heritage buildings project	Looking at Heritage sites and their preservation and replicable models, especially models of business from heritage sites	Promotion of heritage village as a tourist location and implementation of the same	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Youth employment opportunities	To identify youth employment opportunities in 3-4 districts and studying the NITI Ayog and NSDC policies to find best fits	To identify opportunities for sustainable and inclusive economic opportunities, especially for Youth, in the villages of district Barwani	10 - REDUCED INEQUALITIES	12	6 Months
Promotion of SHG Home-made products	Understanding of promotion of SHG products across locations in the country and studying models such as Lijjat Papad to capture best practices and next steps	Helping SIRI SKDRDP better sell their products and reach wider markets	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Maternal and child health indicators project	Present analysis of the challenges and reason behind the Missing mother and child (from public health system) interventions specifically - institutional delivery, and find best practices in chosen 2-3 states	Present analysis of the challenges and reason behind the Missing mother and child (from public health system) interventions specifically - institutional delivery, and suggestive solutions (if any) in chosen 2-3 states	3 - GOOD HEALTH AND WELLBEING	12	6 Months
Bio-technology Start-up Project	Understanding the market for bio-technologies, the challenges faced by them and the market strategies for the same - study at least 3 such technologies and understand their specific concerns	Helping AION get wider market reach and promote their product better	9 - INDUSTRY, INNOVATION AND INFRASTRUCTURE	12	6 Months
Financial literacy for household help project	Understanding the need for financial literacy in domestic help and migrant labourers - assessing their current knowledge and filling gaps of what training needs to be given	Conducting training programs for migrant labourers and domestic help on financial literacy	10 - REDUCED INEQUALITIES	12	6 Months

A GLIMPSE OF PROJECTS (2021-23)

PROJECT NAME	NATIONAL LEVEL STUDY SCOPE	LOCAL PROJECT SCOPE	SDG MAPPING	No. of students	Time
Promotion of Pottery Value Chain Project	Understanding the methods by which pottery have been marketed as a viable product, looking at the labour crisis issues, looking at the ways in which pottery has made inroads into urban markets and for household usage	Creating a case study on the story of Ragu Kullal, his journey and the successes to motivate others who can also take up similar roles - bringing together this case study along with other policy level facilities to enable others to take up this business	8 - DECENT WORK AND ECONOMIC GROWTH	12	6 Months
Handloom Sari Promotion Project	Understanding the ways in which local handloom saris have done market segmentation and targeted the youth	Create awareness material, poster creation, motivate youth to use the Udupi sari and to become a part of the Udupi sari movement	12 - RESPONSIBLE CONSUMPTION AND PRODUCTION	12	6 Months
SBM Ranking and city waste management	SBM Ranking in selected studies - studying methods of testing, ranking and best practices	Swachh Survekshan documentation towards increasing the SBM ranking of the city of Udupi	11 - SUSTAINABLE CITIES AND COMMUNITIES	12	6 Months
Milking Machine SELCO Project	Understanding the market for milking machines - especially those with solar energy and the market strategy to promote this solution better	Developing a market strategy for SELCO and creating material such as WhatsApp videos and posters and deploying the same for wider reach	7 - AFFORDABLE AND CLEAN ENERGY	12	6 Months



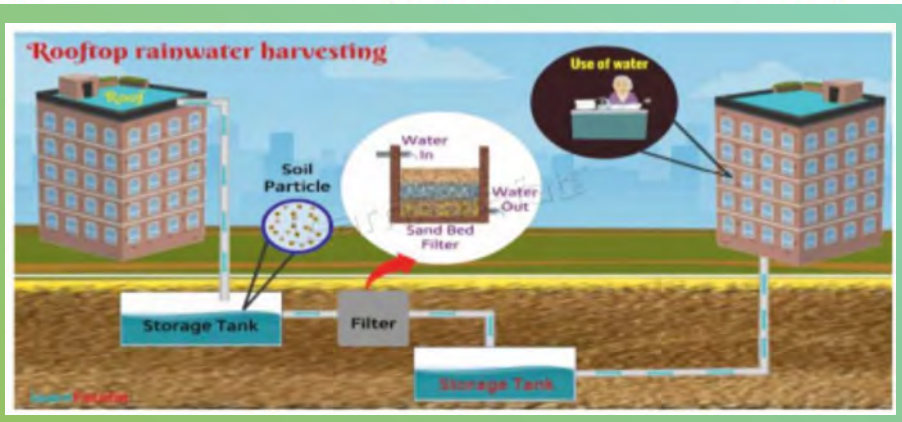
Barrage



Pipelines



Storage Tank



SUSTAINABILITY@TAPMI
STUDENT TESTIMONIALS



"The Heritage Village Project was a challenging and utmost unique experience for us. Much more than an academic requirement, it taught us the values of Teamwork, Collaboration, and thinking out of the box. The Client was very specific about the aesthetics of the project and his views against the commercialization of fine arts was a revelation for us. These days, when everyone looks to churn out money from any small venture, this was truly a breath of fresh air. We are extremely grateful to the Hasta Shilpa Trust, the Seva team, and TAPMI for presenting us such a unique challenge and a valuable life experience at that."

Archit, Student, TAPMI

"Providing innovative solutions to business problems is one of the core management skillset and sustainability is at the heart of it. I feel SEVA project gave us hands-on experience to solve many such issues that too in difficult situations. Applying our own frameworks, controlling the costs, innovations, and modeling a business on paper along with independent decision-making as a team gave us good exposure. It is one of the best offerings at TAPMI to do our part in this world and realize the power of utilizing money properly. The best part is that every decision you take, change will be immediately visible at the client's end and there will be continuous feedback and mentorship by faculty."

Charchit Sharma, Student, TAPMI



"Through SEVA, I also got an opportunity to understand the work in TAPMI as a part of the wonderful campaign run "Sustainability at TAPMI".

Narrowing down to our Project, "Pet Sales Management", we worked for our client was Doglovr, a non-profit organization who worked towards rescuing of stray animals. One of their volunteer Mr Nandakishore was the prime stakeholder whom we worked with."

Priyanka, TAPMI Student

III. BUSINESS IMPACT PLANNING FOR SOCIAL ENTERPRISES (BIPSE) Aligned to SDGs (8, 9, 10, 11, 12 and 13)

Program	Couse Name	Credit	Keywords
MBA Core MBA BKFS MBA HRM MBA MSM	Business Impact Planning for Social Enterprises (BIPSE)	1 credits	Social Entrepreneurship, Micro-enterprises, Impact

People in every corner of the world are solving social and environmental problems in their communities. In the past decade, new programs like MIT Solve have emerged to support those social entrepreneurs. However, many start-ups find it difficult to develop social entrepreneurship business plans that clearly communicate their work and impact to secure funding and other opportunities. The BIPSE course is an attempt to help social entrepreneurs and small socially impactful businesses to articulate their ideas, needs and impact better. The Massachusetts Institute of Technology (MIT) offers the BIPSE course and TAPMI has collaborated with them to ensure that this course is available to all students as an introduction to understanding sustainability.

Solve is an initiative of the Massachusetts Institute of Technology (MIT) with a mission to solve world challenges. Solve is a marketplace for social impact innovation. Through open innovation Challenges, Solve finds incredible tech-based social entrepreneurs all around the world. Solve then brings together MIT's innovation ecosystem and a community of Members to fund and support these entrepreneurs to help them drive lasting, transformational impact.

The TAPMI sustainability overall agenda coincides almost completely with that of SOLVE. While our focus is our immediate neighbourhood and radiating outwards, SOLVE has a global footprint, led by and from a university that is the world's best in Innovation, tech-based social entrepreneurship and human centred design approaches.

Sustainability at TAPMI (S@T) and therefore TAPMI, benefit from the association, the network, course material, facilitator training, funding opportunities and possibility for our students to collaborate with teams from across the world. The learning outcomes of the BIPSE Course are –

- To accurately size and scope a social innovation gap and document characteristics of the target community / users
- To develop a plan that appropriately maps interventions / innovations to the specific gap identified and clearly demonstrates steps to scale the solution

TAPMI has been offering this one credit course for the past three years and has seen immense interest amongst students in understanding the issues and challenges of social enterprises. The course also ties in naturally with the live-project SEVA Course which enables students to find better solutions to the problems of local clients and stakeholders.



IV. INTEGRATION OF SUSTAINABILITY INTO OTHER MBA COURSES Aligned to SDGs (8, 9, 10, 11, 12 and 13)

TAPMI has been offering courses that directly respond to sustainability challenges of this century. But we also understand that sustainability in the business world needs to be integrated into every aspect of work and hence, we attempt at ensuring that principles of sustainability are a part of as many courses as possible. Given below is a representation of a few of the courses in the various MBA programs that have facets of sustainability engrained into them.

Program	Course Name	Credits	Keywords
MBA - Core	Managerial Statistics	3	Equality, Healthcare, Product Life cycle, pollution control, Gender Equality, health
MBA- BKFS	Managerial Communication - II	2	Sustainability oriented communication
MBA - Core	Business Leadership	2	Engage people to create an inclusive and effective organization, Challenges of online exclusion and inclusion, Challenges of online exclusion and inclusion, Social Sensitivity and Inclusive Vision
MBA - Core	Business Research Methods	3	Sustainable business development; product life cycle, cultural diversity
MBA - Core	Legal Aspects of Business	2	Economic justice, rights of citizens,
MBA - Core MBA BKFS MBA HRM MBA MSM	Managerial Communication	2	Alternative energy, climate change, pollution, sustainability, pollution control
MBA - Core	Marketing Management	3	Sustainability Developmental, Cause-related marketing, non-profit marketing, socially responsible marketing
MBA - Core	Managerial Economics	3	Efficiency, consumption, Public sector, Carbon markets, Carbon pricing
MBA - Core	Macro Economics	2	Macroeconomic environment, integrating economic relations, Circular economy, emerging economies of the world, Value Added approach
MBA -Core	Management Accounting and Control	2	Operational Efficiency, Environmental Management Accounting, Environmental Management Accounting
MBA -Core	Financial Management - II	3	Impact Investing, Efficiency
MBA -Core	Financial Accounting	2	Sustainability, CSR & Triple Bottom Line reporting
MBA- Core MBA -BKFS	Financial Management 1 / Corporate Finance	2	Basic introduction to sustainability imperatives from the perspective of the finance,

Program	Course Name	Credits	Keywords
			Understand the investment appraisal of sustainable projects - Basic understanding of net present sustainable value Understand the concept of Sustainable growth rate in capital structure decisions Sarbanes - Oxley act Sustainable Value Creation - Does Profit Maximization impact Sustainability Sustainable Growth Rate Investment Appraisal of Sustainability Projects
MBA -Core	Human Resource Management	3	Diversity & Sustainable HRM
MBA -Core	Individual and Group Dynamics - HRM 5001 (MBA)	3	Globalization, Diversity, Inclusivity, Race, Sexual, Workplace diversity, Equity, Identity
MBA -Core	International Immersion Program	1	Governance
MBA -Core	IT for Business	3	Business / sustainability implications, Cloud computing. Green infrastructure, Green IT
MBA -Core	Strategic Management	3	Sustainability, triple bottom line, sustainable business
MBA -Core	Consumer Behaviour	3	Social Class, Cultural influences
MBA -Core	Marketing Management - II	3	Ethical Responsibility, Ethical & Social Issues
MBA - HRM	Organization Design & Structure	2	Sustainability in Organisations, Social Enterprise, Recycling Business
MBA -Core	Operations Research	3	Transportation & Sustainability
MBA-Core	Strategy Simulation	3	Innovation, ethical responsibilities, Learn to incorporate ethical responsibilities while executing business decisions, Addressing ethical management while considering its impact on firm performance,

TAPMI
(A constituent unit of MAHE, Manipal)

V

SUSTAINABILITY@TAPMI RESEARCH – *SUSTAINSIGHTS*

TAPMI's mission statement propounds the focus on excellence in management learnings, research and practice. We keep research deliverables as a cornerstone of the success of faculty, scholars and in some cases, students as well. Research on sustainable development has also become critical to publication as well as policy implications and hence faculty members in TAPMI have been working towards the same. SustaInsights is a collection of some of the research outputs of TAPMI faculty in the last couple of years in the focus areas of the SDGs.



"In the past decade, business and sustainability are going hand-in-hand. Businesses understand that sustainability is a reality and that focusing on the same is essential for survival in this VUCA world. At TAPMI, this is reflected in our research as well. Faculty members are working on varied issues such as coverage of poverty alleviation schemes, sustainable tourism and work on vulnerable groups and their health and wellbeing. We hope that through these intellectual outputs, we are able to reach policy makers and thinkers to make a sustained change in the field."

Prof Raghunath Rudran
Professor, Dean Research and Area Chair, Operations and Decision Science Area, TAPMI, Manipal

SDG COMPLIANT TAPMI RESEARCH: 2020-2021

UN SDG	UN SDG Theme	Title of Article	Author	Journal
SDG 10	Reduced Inequalities	Mood And Ethical Decision Making: Positive Affect And Corporate Philanthropy	Madhu Veeraraghavan Myeong Gu Seo Don O' Sullivan Leon Zolotoy	Journal of Business Ethics
SDG 4	Quality Education	The Effect of Hatha Yoga Intervention on Student's Creative Ability	Ashish B P S James Shirshendu Ganguli	Acta Psychologica
SDG 11	Sustainable Cities and Communities	Integrated Urban Mobility Policies in Metropolitan Areas: A System Dynamics Approach for the Rhine-Ruhr metropolitan region in Germany	Ani Melkonyan Jennifer Koch Fabian Lohmar Vasanth Kamath Alexander Schmidt Raimund Bleischwitz Victoria Munteanu	Sustainable cities and Society
SDG 3	Good Health and Well-Being	Managing Arrival Variability in Healthcare Services: Case of an Out Patient Department	Piyush Gupta Piyush Pranjal Punam Prasad Amit Sachan	International Journal of Productivity and Quality Management
SDG 4	Quality Education	Exploring adjustment mechanisms of adolescent expat kids from South Asia against socio-political stigma	Pratyush Banerjee Ritu Gupta Musarrat Shaheen Rajasekhar David Chetna Priyadarshini Kalaa Chenji	Journal of Global Mobility
SDG 16	Peace and Justice, Strong Institutions	Controlling opportunism in partnerships: a process view	Dayashankar Maurya Amit K Srivastava	International Journal of Public Sector Management
SDG 12	Responsible Consumption and Production	Role of Psychosocial Factors in Effective Design of Solid Waste Management Programmes: Evidence from India	Vidya Pratap Dayashankar Maurya Seena Biju	Environment and Urbanization Asia

UN SDG	UN SDG Theme	Title of Article	Author	Journal
SDG 12	Responsible Consumption and Production	Waste management businesses and sustainable development goals-exploring linkages	Rajiv V Shah Asit B Acharya	Ecology, Environment and Conservation
SDG 12	Responsible Consumption and Production	Waste Management and Private Sector Participation-Operational and Behavioural Perspectives	Shah R.V. and Guha, Samapti	International Journal of Environment and Waste Management (Scopus)
SDG 8	Decent work and Economic Growth	ESG Disclosures and Investing in India- An Overview	Shah, R.V. and Saraogi A, (2020	An Overview" Management Accountant
SDG 9	Industry Innovation and Infrastructure	Can Indian highways be transformed from killer-ways to safe-ways? Dire need for a multi-pronged Government strategy	Sudeep Kumar S Vishwanathan Iyer	'International Journal of Management
SDG 8	Decent work and Economic growth	Exploration of financial stress indicators in a developing economy	Utkarsh Asheesh Pandey Arvind Ashta Eli Spiegelman E Angela Sutan	Strategic Change
SDG 9	Industry Innovation and Infrastructure	The mediating role of Prosocial Motivation in Predicting Social Entrepreneurial Intentions	Preeti Tiwari Anil K Bhat Jyoti Tikoria	The Journal of Social Entrepreneurship
SDG 12	Responsible consumption and Production	Private Sector Participation in Solid Waste Management and Regulatory Strategy	Rajiv V. Shah, Sampati Gupta	Economic and Political Weekly
SDG 3	Good Health and Well- Being	Managing the COVID-19 Pandemic: Does Social Infrastructure Matter? Evidence from India	Amarendu Nandy, Chhavi Tiwari, Sayantan Kundu	Transforming Government: People, Process and Policy

UN SDG	UN SDG Theme	Title of Article	Author	Journal
SDG 16	Peace and Justice, Strong Institutions	Do policymakers use social media for policy design? A Twitter analytics approach	Amit K Srivastava, Ashish Rathore, Dayashankar Maurya	Australasian Journal of Information Systems
SDG 16	Peace and Justice, Strong Institutions	Relationship between governance mechanisms and contract performance	Dayashankar Maurya, Amit K Srivastava	International Journal of Productivity and Performance Management
SDG 16	Peace and Justice, Strong Institutions	Democracy and the Pricing of Initial Public Offerings Around the World	Huu Nhan Duong, Abhinav Goyal, Vasileios Kallinterakis, Madhu Veeraraghavan	Journal of Financial Economics
SDG 12	Responsible Consumption and Production	Revenue Management for Homestay with TODIM integrated EMSR-b	Kedar Pandurang Joshi, Amol Dhaigude	Journal of Revenue and Pricing Management
SDG 9	Industry, Innovation and Infrastructure	Capacitated facility location-allocation problem for wastewater treatment in an industrial cluster	Manish Sarkhel, Saurabh Chandra, Amit Kumar Srivatsa	Computers & Operations Research
SDG 12	Responsible Consumption and Production	Comments on "A fuzzy multi-criteria approach for measuring sustainability performance of a supplier based on a triple bottom line approach"	Sayan Mukherjee	Journal of Cleaner Production
SDG 9	Industry, Innovation and Infrastructure	The Role Of Health Insurance And Managed Care In India	Sham Ranjan Shetty, Debmallya Chatterjee, Yogesh Pai	International Journal of Management
SDG 3	Good Health and Well-Being	Understanding the Role of Academic Self-Concept, Learning Goal Orientation and Self-Esteem as predictors of Professional Identity	Shruthi Mayur, Lavanya Verma	Gradiva Review Journal

UN SDG	UN SDG Theme	Title of Article	Author	Journal
SDG 3	Good Health and Well-Being	A multi-country test of brief reappraisal interventions on emotions during the COVID-19 pandemic	Srinivasan Tatachari and others	Nature Human Behaviour
SDG 3	Good Health and Well-Being	A system dynamics-based approach towards sustainability of a rural milk dairy venture	Vasanth Kamath, Seena Biju	International Journal of Enterprise Network Management
SDG 16	Peace and Justice, Strong Institutions	Terrorist Attacks, Investor Sentiment and the Pricing of Initial Public Offerings	Yangyang Chen, Abhinav Goyal, Madhu Veeraraghavan, Leon Zolotoy	Journal of Corporate Finance
SDG 8	Decent Work and Economic Growth	Globalization, Financial Development, and Economic Growth: Perils on the Environmental Sustainability of an Emerging Economy	Pradeepta Sethi	Journal of Policy Modeling
SDG 10	Reduced Inequalities	The impact of globalization and financial development on India's income inequality	Pradeepta Sethi and Chhavi Tiwari	Journal of Policy Modeling

THE ROLE OF HEALTH INSURANCE AND MANAGED CARE IN INDIA

International Journal of Management, 2020



SHAM RANJAN SHETTY
Assistant Professor, TAPMI - MAHE

By 2022, the Indian healthcare industry is projected to rise to US$ 372 billion, powered by increased revenue, enhanced health literacy, lifestyle diseases and increased access to insurance (IBEF, 2020). Access to high quality health care is seen as a vital basis for eliminating socio-economic and ethnic inequalities and enhancing the quality of life for all people. Given both the importance of quality and safety in providing patient care, healthcare is an especially important service sector (McFadden, Stock, Gowen III, & Cook, 2006), and the associated cost (Dobrzykowski, Saboori Deilami, Hong, & Kim, 2014). The healthcare industry is a significant and developing research context that can be defined by a strong emphasis on individualized products and a distinguished need for a variety of dispersed supply chain players to collaborate (Boyer & Pronovost, 2010; De Blok, Meijboom, Luijkx, & Schols, 2013).

The ever-rising cost of health care, combined with the need for health care services, the lack of convenient access to affordable health care for people from low-income groups has contributed to the rise of health insurance as an alternate method for funding health care. Historically, health insurance has contributed by playing a central role in improving health care gain access around the world. In most Asian countries, out-of-pocket (OOP) costs are the key source of healthcare funding, and India is no exception. Health sector improvements in India have been fragmentary and gradual, but have led to major improvements in the formation, structure and delivery of healthcare services and funding (Sen, Iyer, & George, 2002). In the 1990s, public investment in the health sector was further squeezed at the state level (Dev & Mooij, 2002), resulting in a failure by the government to even meet the health needs of the public. When investment in public health declined and public sector user fees rose, the private sector came in to utilise the business opportunity (Peters, 2002). These health sector changes are expected to drive OOP health payments upwards in public as well as private hospitals, and these rises are likely to impact the usage of health services and overall health care in turn (Ghosh, 2010). Private spending pays for over 80% of health funding, all being out of pocket contributions and not by any pre-payment systems. Considering the healthcare financing and demand situation, in India's current situation, health insurance has a broader reach. However, deliberate and substantial efforts are required to tap into the Indian health insurance market with proper understanding and preparation (Anita, 2010). New legislation may also be required to strengthen requirements for the delivery of health care. In this scenario, the creation of health insurance was one of the ways in which the government minimized under-funding and increased resources in the health sector. The rising cost of health care, combined with the need for health care services, the lack of accessible quality health care for people from the low income community have resulted in health insurance emerging as an alternative method for health care financing.

India's health care is seriously underfunded and both the government and the public do not have the financial resources to pay for medical care of acceptable quality. Therefore, India is faced with the daunting challenge of meeting its population's healthcare demands and ensuring accessibility, productivity, equality, and healthcare quality. Given this scenario, private health insurance must be generally accepted in the sector and play an important role in solving the gap in health care financing. But in fact, in an unsustainable way, the industry has been stalled by restrictive regulations and obsolete business models and persists to operate under losses. Thomas and Vel (2011) note that there are many challenges facing health insurers in India at present, including weak knowledge, low product recognition, and vague business profitability. Insurers must innovate their product offerings and strengthen their existing procedures and cost structures within their current system.

Historically, health insurance has played a central role in enhancing health care access over the world. In India, the growing level of middle-class income has led to the rise of lifestyle-related illnesses. This has elicited the need for health insurance, amid inflationary health care prices. Given the diversity of the population of India and its limited buying power, to penetrate this huge market, innovative insurance products are needed at several price points. Both existing companies and new entrants agree that the Indian health insurance market has emerged as a new and lucrative developing avenue. Governments have found that providing health care premiums instead of healthcare services by hospitals is much safer for them. In order to obtain the same corporate treatment for illnesses, governments have launched many health care programs for disadvantaged people. In healthcare, the current emphasis is on universal health coverage, along with the reduction in total health expenditures. Exploring performance assessment and benchmarking finds a prominent position in healthcare research with



the rapid speed of growth and spending on healthcare. The increasing cost of delivering healthcare services has generated pressure to recognize the root cause of these growing costs and find ways to rationalize the cost of healthcare in the country (Smith, Nachtmann, & Pohl, 2011). Instead of offering a solution to these problems, India's health financing structure is a source and an aggravating element in the challenges of health disparities, insufficient availability and scope, unequal access, and poor-quality and expensive health care services (Khan & Banerji, 2014).

The evidence on the effect of health insurance in low and middle income countries was analysed and it was found that health insurance increased coverage and usage but had no definitive impact on health status. Spaan et al. (2012) examined the effects of health insurance in African and Asian low- and lower-middle-income countries and discovered a "incomplete,.. patchy and variable quality" evidence base. Additional studies on the impact of health insurance gives conflicting evidence of the impact of health insurance on health outcomes for high-income populations and insufficient data for low- and middle-income populations. Government and private companies will need to concentrate on aspects of benefit design, pricing and knowledge transparency in order to expand the reach and viability of private health insurance policies, and explain requirements on coverage standards and provider quality standards (Bhattacharjya & Sapra, 2008). The pooling of capital to cover risks is assured by an effective framework. In India, health insurance is at a emerging stage and contributes to a limited percentage of health spending. The government has played an important role through its state-run programmes, such as the the Central Government Health Scheme (CGHS), Employee State Insurance Scheme (ESIS) and the Mediclaim scheme provided by government-run insurance firms. Insurance firms have to compete with unregulated health care providers working in an setting where there are no guidelines, treatment protocols and quality standards, and where there are extremely inconsistent billing schemes and large price differences among providers (echoed by the adverse claim ratios). It has also been noted that hospitals charge too much from the patients covered by insurance, but it is difficult to deal with false claims in the dearth of monitoring and control mechanisms. Intermediaries like third party administrators (TPAs) are critical and are required to play a key role in the creation and growth of a managed health care system in order to solve these problems (Bhat & Babu, 2004).

Porter and Teisberg (2006) feel that there is a specific and significant position for health insurers in value-based competition and healthcare innovation. They emphasize that health insurers have to rethink and reorient their whole approach to value-based rivalry. Health insurers must become health associations dedicated to patient and provider data, support and operation, not just administrative, auditing and financial services firms. Therefore, in consumer satisfaction growth, health insurers need to move from becoming opponents to true allies. There is an incentive for insurance firms to create long-term relationships with chosen healthcare services by understanding each other's positions in serving the common customer. The use of technologies would help overcome the current service gap and contribute to increased service quality, better transparency and cost-effectiveness. Insurance companies need to develop plans that take account of the multiple market trends and predict the changes that the sector is bound to see (Reddy et al., 2011). Pay for results, emerging in the US and UK as a creative and effective payment system, should also be considered to increase the standard of treatment in conjunction with other prospective payment methods (Doran et al., 2006; Rosenthal & Dudley, 2007). Many countries including the United States, have concluded that the use of primary health care providers as guardians for specialized facilities and hospital care in their managed care plans is a valuable cost containment mechanism (Ros, Groenewegen, & Delnoij, 2000), but it also relies on well-performing primary health systems and efficient regulation of health care facilities (Lawn, Harries, Anglaret, Myer, & Wood, 2008; Li, Yu, Butler, Yiengprugsawan, & Yu, 2011).

Employee perceptions towards KM and innovation practices in Indian manufacturing: An ISM-SEM based approach

International Journal of Business Excellence, 2021



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Contemporary research articles have established that KM processes enhance innovation across all sectors. In case of manufacturing sectors, globally, innovation is identified as an essential strategy to sustain in the market. This need is sensed in Indian manufacturing as well. In almost every industry consortium and forum, representatives strongly advocate the philosophies of KM and learning organisation for developing a culture of innovation in the organisation.



Prima-facie, it looks evident that at a policy level, the focus on innovation is spot-on, and the firms are heading in the right direction. However, another strand of evidence points out that, Indian companies demonstrate least focus in the matters of new product development (NPD). It is essential to note that, in terms of innovative goods and services, not many Indian businesses have made their presence felt in both global and local arena. This contradiction is of significance for the researchers in KM and Innovation. The void between what is preached and what is followed is an exciting area of study.

Past researchers considered 'the firm' as a unit of analysis. We attempt to provide evidence from knowledge workers across the cross-section of the organisation to ensure that the vision and strategies formulated at the top are percolated across all organisational levels. The study is conducted in the context of select companies in the Indian manufacturing sector. It attempts to highlight the critical success factors and arrive at a theoretical framework through literature review and consultations with strategic management level employees using interpretive structural modelling (ISM). This framework is then analysed statistically through a survey of the knowledge workers (operational level) and findings are reported. The findings reveal gaps in KM and innovation practices and can be beneficial to the managers to make sustainable policies in this regard.

The method used in this research is divided into two stages: first, development of a conceptual model, and second, empirical validation of the model. The first part of the conceptual model development involved the usage of ISM. The first stage of the research identified a list of 17 factors relevant for KM effectiveness and 6 factors relevant for Innovative ability. However, all of these may not be relevant in the Indian manufacturing context. Hence, fuzzy-Delphi method was used to arrive at a focused list of factors. This method provided us the factors worthy of further investigation. Data were collected from 12 strategic management level employees. The experts were asked to evaluate the importance of the factors and were then mapped. Finally, seven factors leading to innovation were narrowed down to. Using ISM, the conceptual model was built and hypothesised to study if the Enablers of KM lead to KM Effectiveness and thereby improve the Innovative ability.

A stratified random sampling approach is used for data collection. Via a Likert style five-point scale, the data, which is qualitative in nature, is translated into quantitative form. It is then processed using statistical packages IBM SPSS Statistics 20, and Smart PLS 3.0. The results obtained through analysis are used to test various hypotheses. The innovation and KM in manufacturing survey instrument were developed in conjunction with subject-area experts, contemporary researchers, and

relevant secondary data. A self-administered questionnaire was the tool used in this study. The respondents were workers in manufacturing industries all over India. An invitation for participation in the survey was sent out to those industries which had considerable scope for product innovation. Data was collected in several phases. Total of 419 respondents was surveyed from 32 industries under the clause of total anonymity. In addition, the respondents in each sector were divided into strata of strategic, tactical and operational levels. To get a better representation of the sample, bigger sample size was used. The questionnaire was sent to 1,649 participants in two stages. A total of 481 employees responded (the response factor was 29.1%), out of which 419 responses were fully filled and were considered for the testing of the hypotheses. 62 responses were considered invalid, as the questions were unanswered. The hypotheses were tested for the 419 respondents.

The results demonstrated the significant influence of KM enabler strategies on KM effectiveness and KM effectiveness on Innovative ability.



The findings of this study establish the following –

- It was observed that people enabler strategies had significance on knowledge creation and application process. Process enabler strategies had an influence on all the processes of KM. Whereas, technology enabler strategies had a significant influence on knowledge acquisition effectiveness.
- The effectiveness of knowledge application had a big impact on the company's innovative ability in comparison to knowledge creation and acquisition.

This study highlights the central voids present in the application of KM to promote innovation in Indian manufacturing. While it is also noteworthy that, despite the strategies in place, the outcomes in terms of innovation are suboptimal. This could also be the fact due to less emphasis on the behaviour side of the individual. The implications of this study for the practitioners are in its ability to showcase the existing ground realities and enables them to identify the gaps. Further. It can be used to implement policies and processes to reinforce KM and innovation.

A SYSTEM DYNAMICS-BASED APPROACH TOWARDS SUSTAINABILITY OF A RURAL MILK DAIRY VENTURE

International Journal of Enterprise Network Management, 2022



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India is one of the largest producers of milk in the world. This sector has both organised and unorganised players; the latter being larger in numbers. The unorganised sector of dairy farming consists of farmers who primarily rely on milch animals to provide an additional source of family income. To enable the producers in both sectors, the Government of India has announced many schemes for encouraging dairy farming.

Despite all these provisions, the dairy industry is witnessing many closures as far as the new ventures are concerned. This is more prevalent in the rural settings. Some of the hedges to this industry are its skyrocketing prices of fuel and supplies, unavailability of fodder, lack of good veterinary consultants, and a dire need for a good supply chain management system. Further, the lack of semi-skilled/ unskilled labour, and associated issues in a labour-intensive industry such as this, has led to the abrupt closure of several ventures. These issues stress the need for a study to understand about the pressing issues impacting the sustainability of the small and medium scale dairy ventures, and how can these dairy ventures ensure sustainability?

We make use of System Dynamics (SD) methodology to study the dynamic complexity of decisions related to dairy farming in various settings. What distinguishes SD from other methods of simulation is its ability to deal with non-linear behaviour of complex dynamic systems and to describe any given system mathematically using quantitative or qualitative modes. Through this study, an attempt is made to investigate and depict the actual picture at the ground level. This is achieved by conducting qualitative interviews amongst the different stakeholders regarding the underlying issues that affected the day-to-day functions. These qualitative interviews enabled the identification of the significant issues where immediate policy intervention was needed.

Further, the participants were encouraged to provide their views towards development of a reliable simulation model by which one was able to explore the effects of critical issues influencing Dairy farmers. Participatory Systems Mapping (PSM) framework was deemed appropriate as it had an inherent ability of enhancing the model's reliability by combining several group process techniques—such as workshops, group discussions, brainstorming, and fieldwork—with SD modelling. The participants in the interviews included academicians, policy makers, entrepreneurs, employees, veterinary consultants, and customers. The interviews aimed to identify the areas of concern which potentially impact the sustainability of the ventures. The stakeholders identified various issues which were broadly grouped under the four essential areas viz-a-viz, Government policies and awareness, Entrepreneurial issues, Workers and employment issues and Veterinary consultant issues. The stakeholders were further interviewed for their views.

In the modelling stage, the framework was used to develop a mental representation, identifying a causal loop diagram (CLD) and a stock and flow diagram (SFD) through which a simulation model can be developed for the venture under consideration. During this stage, mental representations were formalised using mathematical, logical, and theoretical means. Expert opinions were solicited to justify the model. Further, specific values required for the various stocks, flows and auxiliary variables were collected from a dairy venture belonging to one of the respondents. This was done on a convenience basis as the objective of the study was to demonstrate the capability of model-based policy support for different

scenarios instead of arriving at generalizations. The model was tested for robustness for variations in the input parameters. The simulated behaviour of the model was studied and analysed.

As a part of model building and simulation, a dairy farmer based out of Puttur, DK district was approached in March 2017. The venture was selected based on convenience. During the interaction, the dairy farmer appraised us about the challenges faced in sustaining the dairy business. The business started three years ago and had not achieved break-even. The dairy farmer's dilemma was to choose one amongst the two potential strategies in addition to continue as it is (mentioned at the end of the section).

Scenario 1: Rear high yielding cows, produce and sell organic compost and sell.

Scenario 2: Rebrand the product as organic milk and supply at a premium and produce and market organic compost.

Based on the case-facts, a stock and flow diagram was developed, and simulations were carried out until 2025 to study the effect of the three scenarios on the break-even time of the business.

The present study aimed at answering two fundamental questions. The first was to identify the pressing issues impacting the sustainability of the small and medium scale enterprises. Through PSM, the key issues that hampered the dairying sector were identified. The ones that featured most prominently were: High production costs due to increasing fuel prices, Lack of information to start and run the ventures, and Low availability of veterinary consultants. However, the stakeholders identified other issues such as shortage of labour, distance of the Krishi Vignana Kendra (KVK) from the city, low fat content in the milk, lack of knowledge before starting the ventures, and many others.

The second question was, how can these dairy ventures ensure sustainable growth in the light of some of the strategic decisions taken by such ventures. To answer this, the PSM sessions formalised the SFD, and using data from the interviews and secondary literature, simulations were conducted for a time-zone between 2017 and 2025 for a typical rural venture. The results demonstrate, currently, the business-as-usual scenario is not going to be beneficial for him in the long run. Further, given the financial constraints, it is not wise on the part of the dairy farmer to further invest in increasing the capacity of the dairy. The results enable us to suggest that he should focus mainly on rebranding the milk as organic milk and selling it to the market. This works in the current context as there is an increasing demand for organic milk amongst. The encouraging factor is that the modifications can be done without a significant change in the current infrastructure and the labour requirements in comparison to the other options.

The study opens many implications to the dairy farmer under consideration as well as to the academicians who would want to use SD in MSME domain. For the dairy farmer, it gives a clear insight into the implications of the scenarios. System's perspective enables him to foresee the consequences of his decisions. It can be observed that, contrary to the belief of procuring high milk yielding cattle for making profits, the simulation shows that, a much-subdued approach of rebranding as an organic milk producer represents policy levers and fetch the profits with least investment and with a new breakeven for the dairy farmer.

From the academic perspective, this research provides an example of how SD models can be developed using PSM in an entrepreneurial setting. The model developed serves as a base for any researcher working on dairy management domain and entrepreneurial strategizing using SD as a tool.

REVENUE MANAGEMENT FOR HOMESTAY WITH TODIM INTEGRATED EMSR-B

Journal of Revenue and Pricing Management, 2021



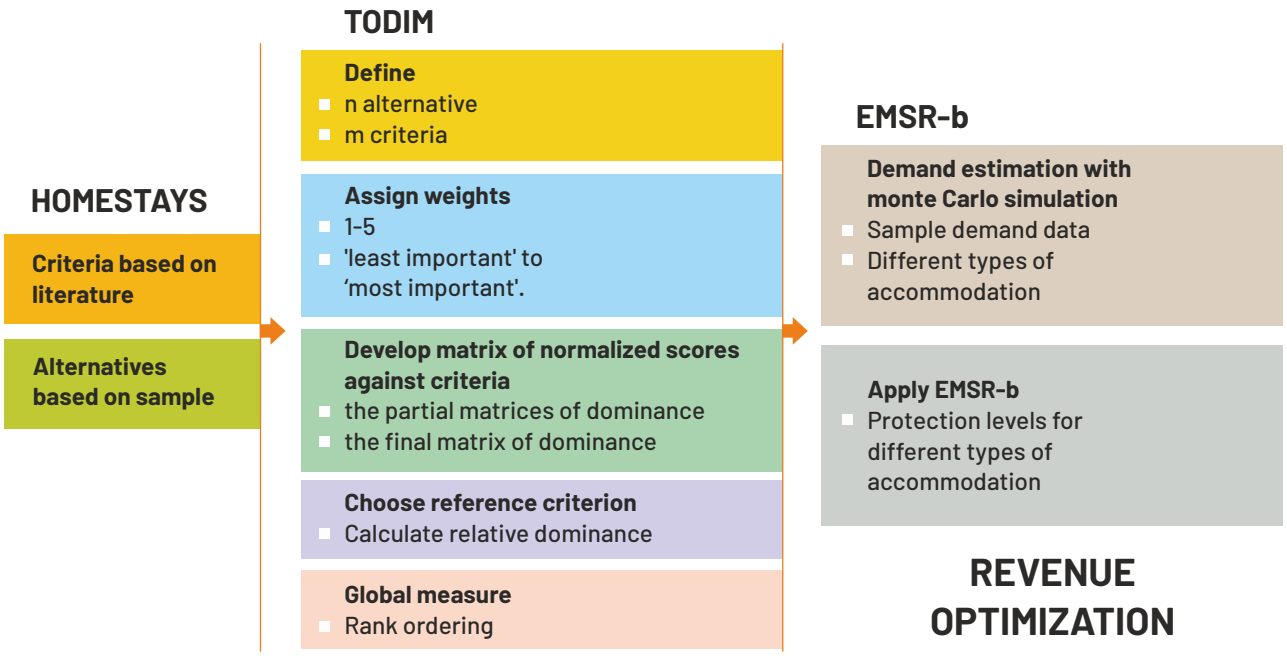


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Homestays are an alternative to the mainstream tourism accommodation and growing consistently for the last couple of decades. As per BCG (2018) report, homestays in India will surpass three billion USD by 2020. Homestays are the unique combination of accommodation experiences of family member or friend's home and traditional lodging facilities.Tourists prefer to homestays for genuine social interactions with hosts, customised services, and seeking novelty. The increasing popularity of homestays has substantial bearings on the tourism industry and has attracted the attention of scholars across the globe. Many homestay managers or owners are unable to deal with market dynamics during the peak and off-peak season. There is a need to adopt a structured data driven approach to enhance the revenue for the property. This study adopted a two-stepped mixed-methods approach to help homestay owners. Criteria for homestay selection has been identified using the existing literature and is used for modelling. The proposed work unites two unique methods, i.e., TODIM and EMSR-b, in the context of revenue management (RM) for homestays. This study is one of the earliest attempts to integrate TODIM and EMSR-b method. The proposed approach enables Homestay owners to allocate the capacity across various segments to maximise revenue.

METHODOLOGY



The methods used in this study are listed in the pictorial depiction above, which includes ranking homestays with TODIM and obtain protection levels for different classes or packages offered by homestays using EMSR b heuristics. TODIM (an acronym in Portuguese of Interactive and Multicriteria Decision Making) is a discrete multi-criteria system based on the prospects theory. Unlike all other multi-criteria methods, the TODIM approach uses global value measure calculated through the application of the Prospect theory. In this way, the method is based on a description of how individuals, confirmed by empirical proof, effectively make choices in the face of risk. The TODIM method includes pairwise comparisons between the decision criteria, along with eliminating infrequent inconsistencies. The value function of the TODIM method produces form as that of the gain/loss function of Prospect Theory, unlike the of all multi-criteria problems in the scope of risk. For both qualitative and quantitative parameters, TODIM may be used., i.e., value assessments on a

verbal scale, using a hierarchy of parameters, fuzzy and using interdependence relations amongst alternatives. From the literature and secondary sources, such as web pages of the respective homestays in the region, the relevant information was collected. This list of alternatives comprised of homestays in the region of Chikmangalur (Coffee Plantation hub). This hill station in Karnataka, a state in southwest India is famous for its Coffee plantations; Holy pilgrimage i.e., Baba Budangiri, a mountain range in the Western Ghats, with three large caves, Trails through forests and grasslands leading to Mullayanagiri Peak, the Hebbe Falls; Wildlife safari in the forested Bhadra Wildlife Sanctuary, northwest of Chikmangalur, is home to elephants, tigers, and leopards.

Citizens in nearby metro city like Bengaluru travel here throughout the year for serenity and to enjoy their vacation. There are many Homestays available in this region for Chikmangalur experience. For this study, ten homestays (A1-A10) are considered, and the data is collected from customers of these homestays regarding their viewpoints in selecting the Homestay.



Sample: 77 respondents (34 women and 43 men) were included in the survey. 12.22 percent is 20 or less in terms of age in years; 50 percent is between 21 and 30; 24.44 percent is between 31 and 40; 10 percent is between 41 and 50; and 3.33 percent is between 51 and 60. Also gathered was the profile of hotel-booking preferences. In the last 24 months, just 24 percent of respondents had not made any reservations. Of the 68 respondents who made reservations, 50 percent made one or two reservations, 32.35 percent made reservations between three and five, 10.29 percent made reservations between six and nine, and 7.35 percent made ten or more reservations.

Data collection: The information was collected between June and August 2019 using an ad hoc questionnaire developed specifically for this research. Eight criteria are shortlisted for this work, based on the points of view presented in interviews with customers of these homestays. The eight critical evaluation criteria for this work have been identified and are defined as follows: price per person per night (C1), availability of food (C2), amenities provided (C3), customer feedback (C4), service (C5), description

of location (C6), recreational choices (C7) and ease of booking (C8). Given the characteristics of the study field, all other relevant requirements are expressed in these eight criteria.

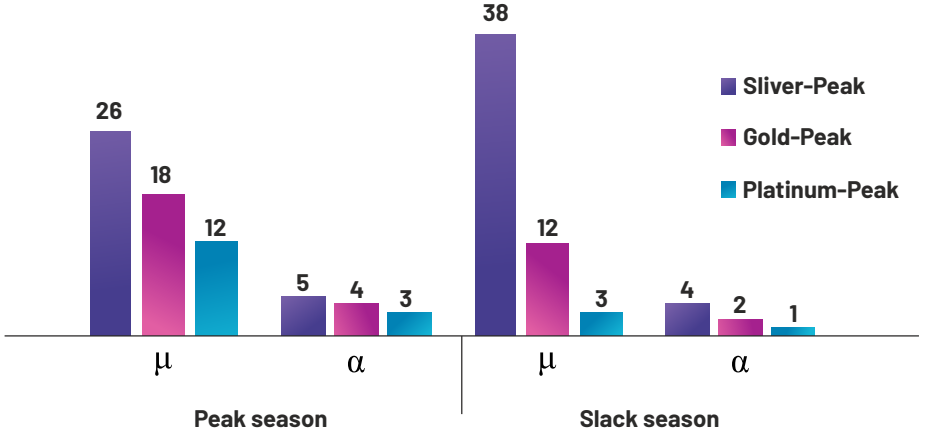
Through the significance given to the parameters used to measure the homestays, the respondents specified their corresponding weights through direct valuation. The direct valuation involved of assigning a numeral, where one would mean 'least significant' and five would mean 'most significant.' Later these are normalised. The respondents rated the Price as the most critical criterion followed by Reviews and Service. The least preferred criteria are Amenities provided and Ease of booking.

Alternative	A6	A10	A7	A3	A9	A8	A5	A4	A2	A1
Normalized global value	1.00	0.91	0.90	0.78	0.65	0.65	0.62	0.61	0.57	-
Ranking	1	2	3	4	5	6	7	8	9	10

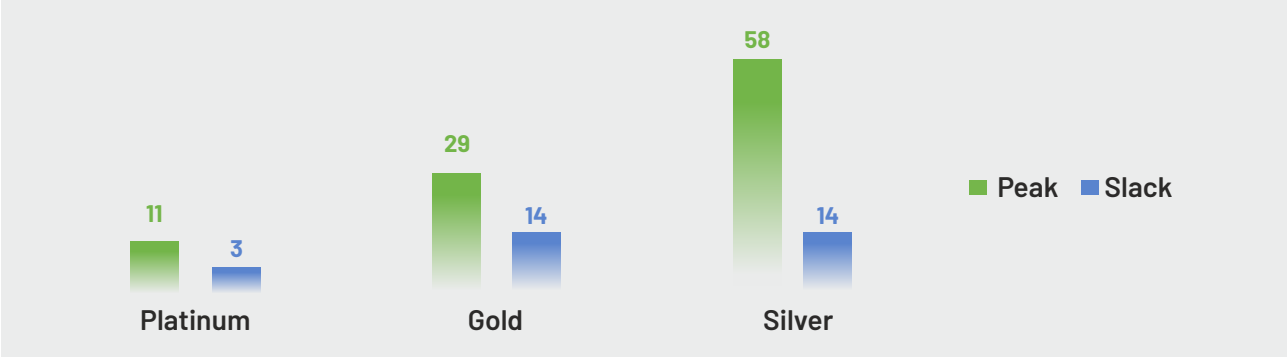
MULTI-CLASS CAPACITY ALLOCATION DURING PEAK AND SLACK SEASON

Based on obtained rankings, there is more concentration of demand for the top three. Therefore, the demand for such homestays will be more than its limited capacity in both peak and slack (off-peak) season relatively. A homestay with 68 people accommodation capacity and different packages is considered for demonstration of EMSR-b heuristics. Based on the interaction with the owner of this Homestay, the demand is considered for computation. The current pricing practice for the slack season is 10% flat discount. Therefore, the demand also changes for each package, accordingly, as mentioned below.

Packages	Fare (₹)	Food
Basic	1,800	Breakfast, Lunch, Snacks and Dinner (Pay and Eat)
Silver	3,600	Breakfast, Lunch, Snacks and Dinner (Free)
Gold	4,950	Welcome Drink, Breakfast, Lunch, Customized Snacks and Dinner (Free); White or Red Wine (Free)
Platinum	7,650	Welcome Drink, Breakfast, Lunch, Customized Snacks and Dinner (Free); White or Red Wine (Free); Local Entertainment (Free), Complementary sightseeing



For better approximation of the demand, we run the parameters using Monte-Carlo simulation. The established demand parameters are used as inputs for EMSR-b. The protection levels for each package class are estimated and presented below.



Manager of the Homestay must protect respective capacity in both seasons for each type of package, which optimises the revenue for the Homestay in the respective season. The results indicated that seats protected during peak season increased to three fold than that of slack season for Platinum class. The manager or owner of Homestay can quickly adopt this methodology to maximise the revenue during both seasons. This methodology enables better resource planning like a needed workforce, inventory of food items concerning different packages provided. Customers also get benefitted because of different packages available during the respective seasons, which will lead to higher satisfaction of the customer and better goodwill for homestays.

Further reading please refer

Joshi, K. P., & Dhaigude, A. (2021). Revenue management for homestay with TODIM-integrated EMSR-b. Journal of Revenue and Pricing Management, 20(2), 134-148.

CAPACITATED FACILITY LOCATION–ALLOCATION PROBLEM FOR WASTEWATER TREATMENT IN AN INDUSTRIAL CLUSTER

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Freshwater scarcity is turning out to be a major problem in recent times. Many countries, particularly in the Middle East, parts of Asia, and Africa are deeply affected by the same. Further, the contamination of freshwater sources, which is prevalent in developing countries, amplifies this scarcity. For example, in India, 70% of the country's freshwater is contaminated and unfit for consumption. Most of this contamination is due to untreated sewage and industrial wastewater. Even though the legislation against industrial contamination of freshwater existed for many decades, they were ineffective due to multiple reasons. For instance, as per the Water (Prevention and Control of Pollution) Act, 1974, in India, industries such as textile, leather, paper, etc. are required to treat effluents (wastewater) before disposing it off to the external environment, such as rivers, sea, etc. In this regard, The Water (PCP) Act also, 1974, raises severe concerns regarding the sustainability of small-scale industries (SSIs) as the firms individually lack resources such as adequate capital, manpower, access to land, etc. for establishing their own Independent Effluent Treatment Plants (IETP).

In the last few years, the Government of India has realized a need for urgent action and is creating a massive network of wastewater treatment plants along the water bodies. For example, the Namami Gange, India's flagship program to clean the river Ganga won the "Public Water Agency of the Year" at the Global Water Summit in 2019. Namami Gange aims to not only refurbish but also build wastewater and sewage treatment plants across Ganga.

For SSIs which lack the resources to build IETPs, the Government of India proposed establishment of joint wastewater treatment facilities that share the facility among the member-firms, referred to as Common Effluent Treatment Plants (CETP). Such CETP networks are largely promoted by various government agencies by providing subsidies while defining the operational boundaries.

The CETPs are typically preferred by firms over IETPs as scale economies are present in wastewater treatment. Scale economies help in reducing capital expenditure and operational costs for the member firms. On the other hand, empirical evidence suggests that costs associated with the reduction of pollution concentration of the wastewater supplied by the member-firms have diseconomies of scale. Diseconomies of scale increase effluent treatment costs at the CETP facility. Likewise, a multitude of aspects that exhibit externalities for the participating firms play a significant role in the firms strategic and economic incentives in adopting CETP versus IETP network structure.

In this paper, we present a location–allocation optimization problem for wastewater treatment in a cluster of processing units. The problem involves installing wastewater treatment plants of appropriate capacities at suitable locations and allocating processing units to these plants such that the cost of treatment





remains as less as possible. A real-world case study is presented to illustrate the results of the model along with a multi-objective analysis from the Tirupur industrial cluster. Tirupur is a city located in the southern state of Tamil Nadu in India. It is a major cotton textile manufacturing cluster in India. Many integrated and small-scale textile manufacturing units are in and around the town. The small-scale textile manufacturing units are primarily involved in one or multiple stages of the textile manufacturing process. One of the essential stages of textile manufacturing is dyeing and bleaching. It is done to impart color to the fabric. The dyeing/bleaching process consumes large amounts of water and produces effluents. The effluent discharged from these firms contains a lot of dissolved salts used as a binding agent during the dyeing process. This is toxic to living organisms and needs to be treated before disposal. So far eighteen CETPs have been established in Tirupur to treat effluents coming out of the dyeing and bleaching units in the area. These cater to the needs of around 380 dyeing and bleaching units.

Most of the dyeing and bleaching units using the CETPs are small and medium scale enterprises. They lack the resources to set up their own individual effluent treatment plants. Hence, they cooperate with other such small-scale units to set up CETPs. The number of member firms connected to each CETP is different. This is primarily dependent upon the pollution load in the effluent, the volume of effluent discharged by the member firms and the distance of the firms from the potential CETP locations. The potential CETP locations are determined from the geography of the area. CETPs located at a lower height as compared to the firms which it is catering to is preferred due to savings on effluent transportation costs from the member firms to the CETP via pipelines. The effluents are pumped via manifolds to the main pipeline connected to a CETP.

The current CETP facilities were started as a pilot project with a small total treatment capacity. Due to new production facilities coming up in the region and projected effluent generation far exceeding the installed capacity of the current CETP installations, a new facility location and allocation design is required to install new CETPs to fulfill the projected demand from the member factories. The CETP facility location-allocation problem deals with identifying CETPs of appropriate sizes to be installed at most suitable locations and connecting each individual factory to exactly one installed CETP, such that overall treatment capacity at each installed CETP matches the effluent discharge from all the connected firms.

Our objective in the paper was to minimize the cost of installation, pipeline connection, and operational cost of effluent treatment. Potential CETP locations were identified. A CETP plant can be customized as per the requirements, although we have considered potential alternative types of CETPs. Each type of CETP has different characteristics in terms of treatment capacity in kiloliter per day (kl/day), a fixed cost of installation in INR. Other costs include the cost of connecting factories to installed CETPs and cost of treating wastewater. Cost of treating the effluent discharge is a non-linear function of water flow in kl/day and concentration of pollutants in g/kl in the wastewater.

The CETP system design problem presents itself as a challenging problem owing to the large-scale and nonconvex non-linear operational costs. The problem is not solvable by commercially available solvers. Hence, the methods devised in our paper help to solve such large-scale problems exactly.

Our results provide insights into better management and efficient operation of CETPs in industrial clusters. Assigning firms to CETPs in industrial clusters based upon the pollution levels in their respective effluents reduces the operating costs and subsequently increases their profit margins. As CETPs become more efficient, large firms operating their own IETPs consider the decision of joining CETPs. This further reduces the CETP operating costs due to economies of scale. Furthermore, it leads to reduction in pollution load in water bodies causing less damage to flora and fauna around and within the water body.

VI

SUSTAINABILITY@TAPMI - PROJECTS

TAPMI and TCSC has been working actively with sectoral partners in the path towards bringing sustainability solutions to the problems of local communities that we engage with. Our partners enable us to link small consumer and small producers to better financiers, better skill and capacity building opportunities, better market linkages and to young minds and student interventions. In the last few years, we have actively worked with our partners to learn, solve, immerse, address and experience sustainability, local community needs and business in our geography.

Our partners come across various spectrums including educational institutions, non-governmental organisations, entrepreneurs, businesses and individuals. We work with non-governmental organisations (NGOs) such organisations working with rural artisans, persons with disabilities, local rural women and youth as well as tribal populations. We work with farmers and farmer producer organisations as well as dairy cooperatives across the local regions. Our research and prototyping work often enable us to partner with educational institutes, incubation centers and training institutions where skill development and trainings are carried out. We work very closely with local decentralized government bodies and with specific departments such as the tourism, horticulture and public works department as well as village level panchayats (decentralized elected bodies). Our work also enables such to partner with microfinance institutions and self-help groups who are often working on various income generation and livelihood projects, especially for women.

We also work closely with individuals who are passionate about sustainability and are working towards bringing about positive social change through activities such as designing earth-friendly building, enabling better education outcomes through alternate education, enabling rural employment through promotion of local crafts and textiles etc. Our work also helps us connect with small and micro entrepreneurs who are working on social causes and helping develop the community. We have corporate partners who enable to us look at systemic and structural changes as well as project partners who come in forms of industry associations, associations of specific skill workers etc.

Internally, TAPMI's community, including student bodies and faculty members work continuously and tireless on various sustainability projects either in an individual or a joint capacity. These include research projects, student competitions and student club activities to name a few.



Given below is a list of TAPMI's partners amongst the various types of stakeholders that we work with –

TAPMI PARTNER BY TYPE	TAPMI PARTNERS BY NAME
NON-GOVERNMENTAL ORGANISATIONS Aligned with SDGs (1, 8,10,13)	Organisations working with rural artisans such as Kadike Trust and C E Kamath Institute of Artisans (CEKIA) Organisations working with persons with disabilities such as ASARE, MANASA Rehabilitation Trust Organisations working with rural youth and women such as Bharatiya Vikas Trust and Shri Kshethra Dharmasthala Rural Development Program (SKDRDP) and Transform Rural India Foundation (TRIF) Organizations working on animal welfare and animal rights
EDUCATIONAL INSTITUTIONS Aligned with SDGs (4, 5, 7, 9, 10, 11)	Incubation institutions such as Manipal Universal Technology and Business Incubator (MUTBI) Skill and higher education schools such as Faculty of Architecture, MAHE, Innovation Centre, MAHE and the Welcome Group of Hotel Administration, Local government and primary schools
LOCAL GOVERNMENT Aligned with SDGs (1, 5, 6, 8, 10, 11)	Government departments of Tourism, Horticulture and Public Works to name a few
ASSOCIATIONS Aligned with SDGs (1, 5, 8, 9, 10)	Farmer producer organisations such as the Mattu Gulla Farmer Organizations and milk cooperatives such as the Dakshin Kannada Milk Union Limited
CORPORATE PARTNERS & START-UPS Aligned with SDGs (5, 8, 9, 10, 12)	Corporate partners such as BRAG, Brillio, BlackFrog Technologies, Farmazzy and AION Healthcare Systems
LOCAL ENTREPRENEURS Aligned with SDGs (4, 5, 8, 10, 12, 13)	Entrepreneurs and individuals such as educationists, architects, bakers, craftsmen and caterers who are working towards better livelihood opportunities for the vulnerable.
MICROFINANCE INSTITUTIONS Aligned with SDGs (5, 8, 9 10)	Institutions such as Navodaya, SKDRDP etc who are working to provide financial inclusion and services for the poor.

TAPMI and TCSC aim at building networks, creating joint task forces and enabling community lead solutions for business/ environmental and access to resource-based problems for our local communities



TAPMI's involvement with project partners in the last couple of years has been restricted due to lack of mobility resulting from the pandemic. We had made commitments to the local government bodies to work on two projects and despite the pandemic, we have been able to honour our commitment. We have adapted the data collection process of the projects to an online mode and have been able to deliver the necessary outcomes. The two projects that we have worked on the last couple of years include –



- **Project on the current status on menstrual waste disposal in the district of Udupi, Karnataka and**
- **Project of the status of piped water supply to households in the district of Udupi, Karnataka.**

Both these projects have been with the local decentralized government body which is called the District Zilla Parishad. This elected body is in charge of civic amenities such as access to roads, water, electricity and waste disposal in the district of Udupi and its subsidiaries and we had the opportunity of working with them.The aim of the project on menstrual waste management was to identify the current prevalent practices and to provide alternatives for unsustainable approaches. The study found that the current practices of disposal of menstrual pads were unscientific and toxic to the environment. A detailed analysis of the status of knowledge and awareness amongst stakeholders was done. The TAPMI team also worked on identifying eco-friendly alternatives that would enable quality service to young menstruating girls and also be earth friendly. Specific details of the alternative products along with sourcing data were provided.

The project on access to piped water supply was carried out to understand the satisfaction of citizens who have access to piped drinking water and to identify the issues faced by them. This project was carried out during the peak of the pandemic and hence the TAPMI team had to collect the data via the telephone. Visits were made only when possible, to government offices and public schools to understand the status of piped drinking water. Overall, the team found that access to water is available but has multiple issues such as quality of water, quantity of water and the distance from the piped water source to the household. The study helped the team to gather data on the pain points of citizens and the same was communicated to the government team to enable them to improve services.

VII

SUSTAINABILITY@TAPMI – STUDENT TEAMS

TAPMI has two student committees that work directly on sustainability issues. These are the Social Endeavor Group (SEG) and the Sustainability Committee of TAPMI (SCOT).



1. SOCIAL ENDEAVOR GROUP – Social Endeavor group believes in making our community a better place to live in, one step at a time. We work for social causes in and around Manipal. We believe in contributing to society by exuberating value bonds. We pick and work on projects to comply with Sustainable Development Goals (SDGs) relating to hunger, good health, quality education, responsible consumption, and production by partnering with various communities. Our motto is "Do what you can with what you have, where you are" and this message is imbibed in our events and activities and in the people who carry them out.

Every year we conduct multiple events to come closer to our goal and give back to society. We organize Daan Utsav, a 6 day-long event to celebrate the joy of giving. Events such as blood donation camps and, thank-you meals are part of this initiative. We conduct Mindful Mandate, a series of 3 events aimed at raising awareness about mental wellbeing. On the eve of Christmas SEG provides a platform for TAPMI'ans to be the Santa and fulfil the wishes of students from Academy Public School, Manipal. We also conduct computer training programme under Digital Champs to help school students learn the basics of computers.

SEG promotes the concept of reuse and recycling by conducting Bucket collection and distribution drives where items such as Buckets, dustbins, and mugs are collected from the graduating batch and distributed to the incoming batch in the next academic year. We also organize clothing drive where students from TAPMI can donate clothes and other articles as a way of giving back to society.

"It was thrilling to discover that my MBA life would entail more than just business concepts and their application in real-world scenarios. Social service, community welfare, and philanthropy have always piqued my interest. My enthusiasm is reflected in the fact that I am a member of TAPMI's Social Endeavors Group. The concept of SEVA piqued my curiosity because it connects my passions with my education."

Anusha Nayak, TAPMI Student



2. SUSTAINABILITY COMMITTEE OF TAPMI - "Sustainability is the way of life" – Sustainability Committee of TAPMI was formed with the motto of integrating sustainability into the daily lives of students and various other stakeholders of TAPMI. Our vision is to instil and educate the idea of sustainability to future leaders and entrepreneurs influencing their day-to-day business decisions. It is the person's ability to sustain life around them, to do and build things that is for betterment of all. It includes protecting the environment, social welfare, supporting Micro-Entrepreneurship, integrating sustainability into young businesses and many more. Established to integrate the Principles for Responsible Management Education (PRME) in B-school curriculum, our goal is to create awareness around 'Sustainability' and make information easily available for all.

Working through Six Principles, SCOT via PRME engages with TAPMIANS to ensure they provide leadership with the holistic skills needed to balance economic and sustainability goals, while drawing attention to the Sustainable Development Goals (SDGs) that form the underlying cornerstone of SCOT. We aim to propagate the awareness of Sustainable Development Goals among the TAPMI community to shift the world onto a sustainable and resilient path.

TAPMI

(A constituent unit of MAHE, Manipal)

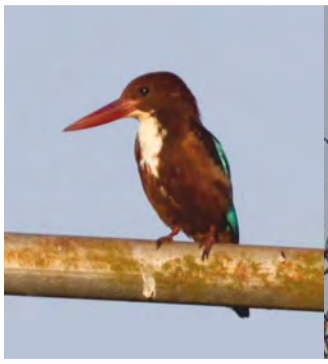
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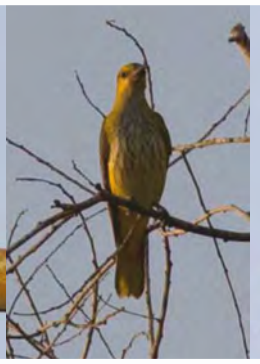
VIII

SUSTAINABILITY@TAPMI – GREEN CAMPUS



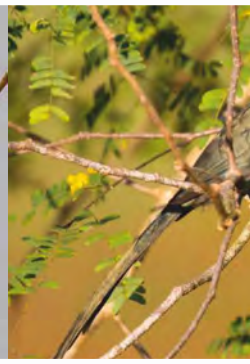












TAPMI is a kaleidoscope of greenery, lush forests, flora and fauna. The campus is filled with various types of plants, flowering bushed and trees. The campus also sees a coexistence of birds, animals, reptiles and human beings, who all live together and create a mini-eco-system within these 44 acres.











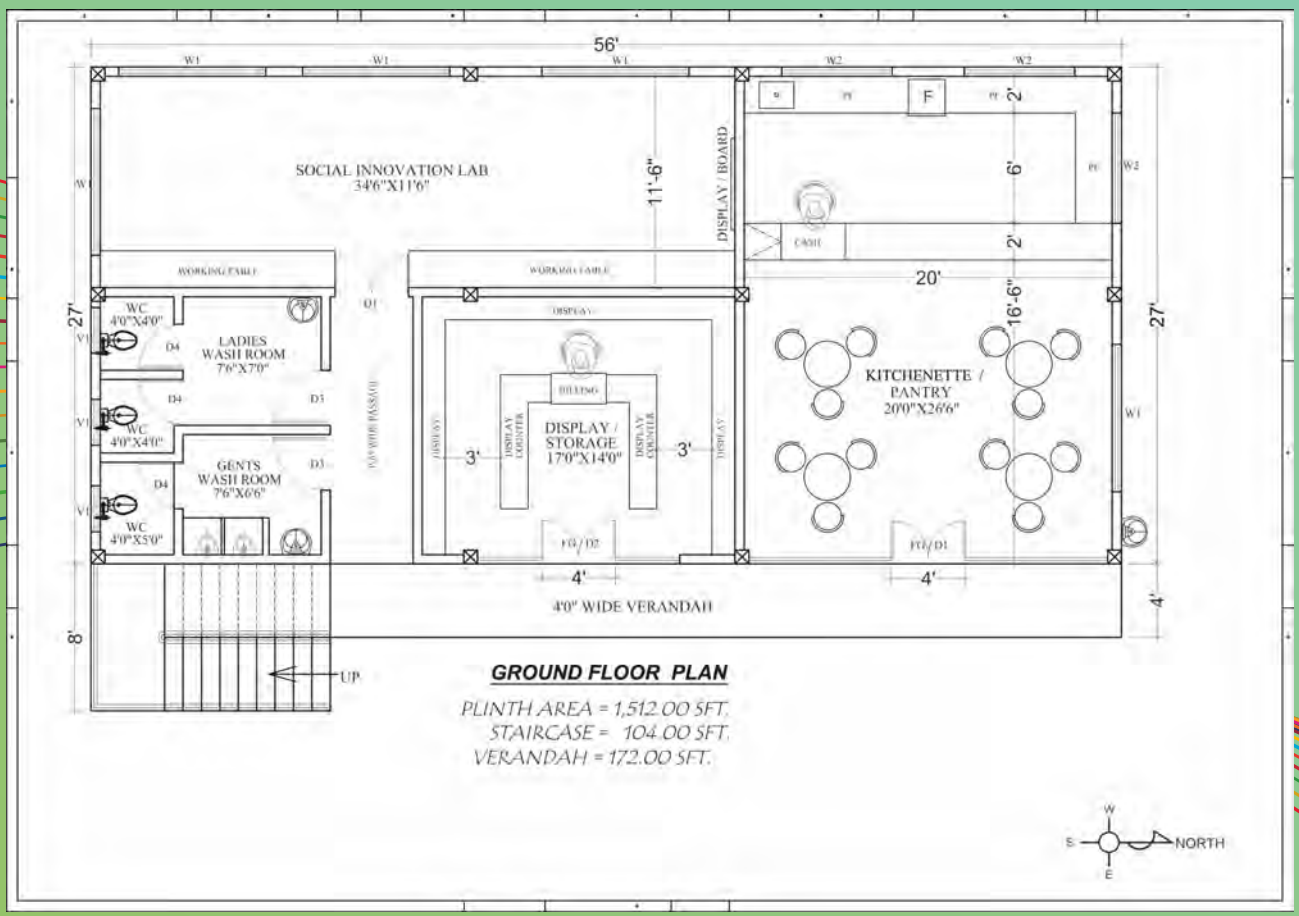


IX

SUSTAINABILITY@TAPMI - OUR PATH AHEAD

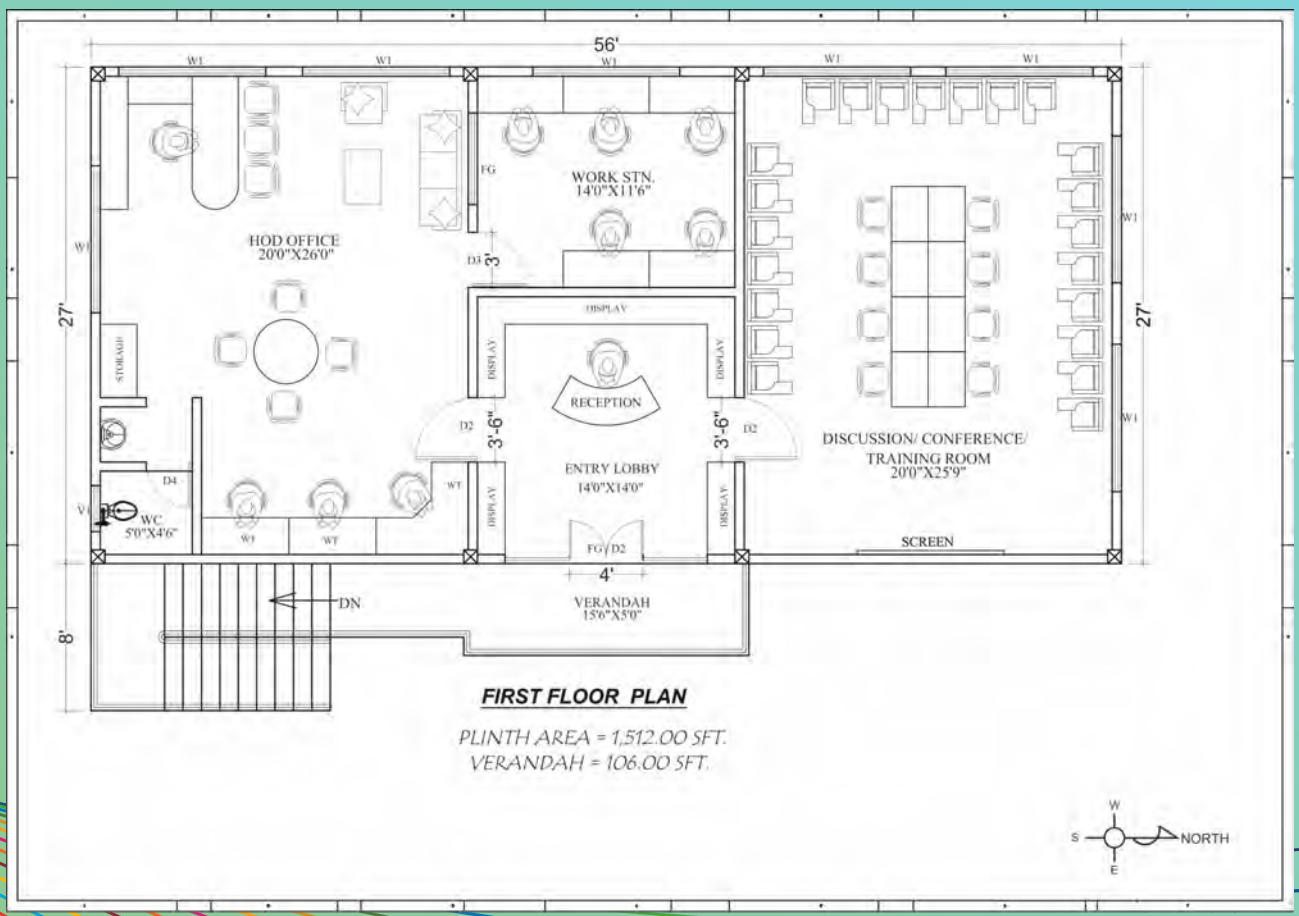
At TAPMI, we have some exciting activities planned for the two years ahead of us. This includes the brand-new space that is being created for sustainability activities, our increased focus on live projects, the launch of new programs and the sustainability focus in them and the new networking and information dissemination opportunities in the form of workshops and conferences.

Our exciting new project is the Sustainability Hub at TAPMI which is a location planned for sustainability, social innovation and entrepreneurship related activities. Designed to foster innovation through a decentralised and creative mindset, the space will enable students, entrepreneurs, incubators and thinkers to come together and find solutions for the sustainability challenges of the community and beyond.



We are also working towards setting up new projects in the live projects part of our work and are expanding our horizons to the national and international scenarios. Our new programs, including the Bachelor of Business Administration program in Bangalore and the MBA program in International Business, have necessitated finding new partners, more exciting projects and expanding our horizons.

We also look forward to building new partnerships and networks through our continued engagement with stakeholders. This will be further cemented through the CR3+ conference which we shall host. We are part of the prestigious CR3+ Consortia consisting of 5 Champion Schools including the Hanken School of Business, Helsinki Finland, the Audencia Business School, France, ISAE Brazil, La Trobe University Business School, Australia and TAPMI, India. We will be hosting the 2023 Global Conference on 'Sustainability as a Source of Competitive Advantage' and this will enable to work closely with world leaders in the space of sustainability.



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SUSTAINABILITY@TAPMI – TAPMI SUSTAINABILITY TEAM



ISHWAR HARITAS, Associate Professor, Strategy and General Management Area, TAPMI , Manipal and Chair, TCSC

In a career spanning over 15 years Prof. Haritas has worked in industry, not for profit organizations and Inter-governmental agencies, in over 15 countries, across 3 continents, on scores of strategy design and execution projects / programmes. He has worked with prestigious institutions such as the T Mobile International and the International Trade Centre, Prior to joining TAPMI Prof. Haritas worked as Principal Advisor on strategy and sustainability issues, advising foundations, governments, intergovernmental organizations and private firms.



PURNIMA VENKAT, Assistant Professor, Strategy and General Management Area, TAPMI , Manipal and Co-Chair, TCSC

Purnima Venkat is a social development professional who has been working in various sectors and across various geographies since 2007. She has rich experience in the areas of micro-entrepreneurship, rights of marginalized sections, creation of small enterprises and renewable energy. She has been engaged in the field of academia since 2015 and has created her niche in the area of experiential learning. At TAPMI, she is the Co-Chair of the TAPMI Centre for Inclusive Growth and Competitiveness and works closely with field level stakeholders across sectors to forward the agenda of sustainability in businesses.

MUNEZA KAGZI, Assistant Professor, Strategy and General Management Area, TAPMI , Manipal

Muneza Kagzi completed her PhD from the Indian Institute of Management Rohtak with a specialization in Strategic Management. Prior to that she has completed her MBA and BBA with specialization in Finance from South Gujarat University, Surat. During her MBA she was the recipient of various awards including Gold Medal for excellent performance in studies and Best Student of the Year. She has approximately 4 years of teaching experience at various management institutes.



ANIRUDDHA CHATTERJEE
Assistant Professor & Chairperson- Admissions

Prof. Aniruddha has over 15 years of work experience, including industry (Indian Oil Corporation Limited, Simplex Infrastructure Ltd.), teaching and academic research (XLRI, Jamshedpur and Macquarie University, Sydney). His PhD thesis is based on the theme of 'Collective Mindfulness and its Implications for Strategy'. His research papers have been presented at several national and international conferences, including AOM, SMS, EURAM, EGOS, ICBM, ANZIBA, in Universities in Hyderabad, Chicago, Brisbane, Sydney and Lisbon. He has also conducted workshops and professional training for reputed academic and corporate clients.





VIDYA PRATAP, Associate Professor, Human Resources, Organizational Behaviour and Communications Area, TAPMI , Manipal

Prof Vidya Pratap has multiple years of work experience in the space of academics and waste management. She has been instrumental in implementing live projects and putting systems in place for operationalising sustainability. She has put in place a waste management system in 2 wards of Kasturba Hospital, Manipal, India by installing pictorial boards and separate bins for organic and inorganic wastes in August 2006. She has conducted various workshops on waste management and is an avid proponent of better waste practices.

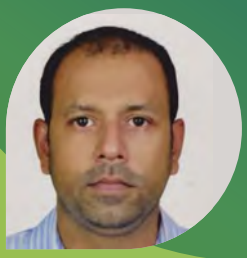


ISSAC K VARGHESE, Assistant Professor, Strategy and General Management Area, TAPMI , Manipal

He has completed his FPM (Strategy) from Indian Institute of Management, Lucknow, India and has 2.6 years of industry experience. He kick-started his career with Cognizant Technology Solutions as an Automation Test Engineer and also worked with The Federal Bank Limited as an Assistant Manager. He has academic work experience with prestigious Indian institutions such as Justice K. S. Hegde Institute of Management, India Rajagiri Business School, India and Loyola Institute of Business Administration, India.

ATMA PRAKASH OJHA
Assistant Professor and Co-Chair – Strategy and General Management Area

Atma Prakash Ojha works in the area of entrepreneurial decision-making and examines how emotions influence the same. He specifically looks at the role of shame in influencing decisions involving opportunity assessment, advice, and ethical decisions. He uses an experimental design to study entrepreneurial decision-making.



LATHA TAKUR, Executive, TCSC

Latha Takur is Executive at TCSC. She is instrumental in management of the affairs of the centre and in collaborating with various stakeholders and partners of the centre. She has completed her MBA in Human Resource Management and is key to project management and documentation at the centre.



XI

SUSTAINABILITY@TAPMI - SERVICES FROM TCSC

TCSC offers a range of services to meet the current need of the development and sustainability fields in India. There is an urgent need for capacity building amongst development professionals and TCSC aims to fill this gap. We have tailormade our services in such a manner that each training program is designed with stakeholders rather than merely for them. This is in keeping with our philosophy that all projects/ services and interventions need to be designed with the clients rather than with a top-down approach. Our services are also centred around development professionals and those looking to work in the spectrums of sustainability

Services we provide: 2. Management Development Programs & Certificate Programs & Management Development Programs 3. Immersion Programs 1. Certificate Programs Illustrated below is an image of the types and customizations possible with our capacity building programs –

Our main areas of intervention are development and sustainability are –

- Strategy based
- Implementation-based and
- Evaluation based

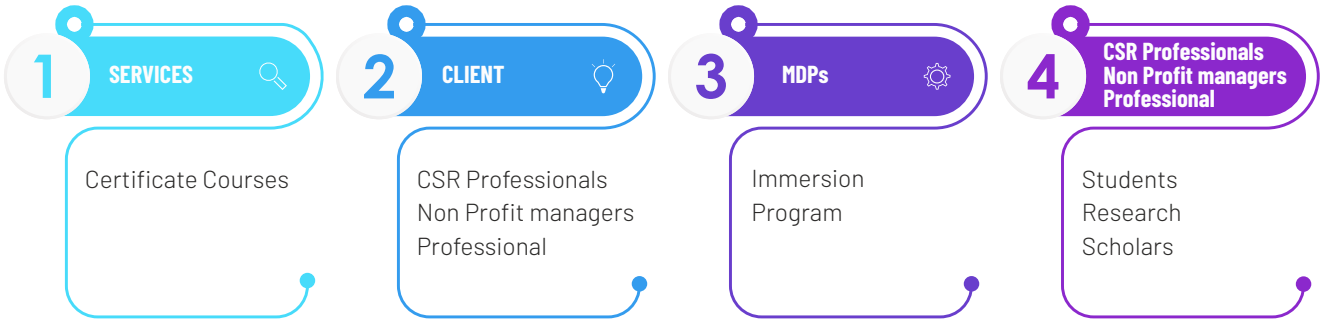
We believe that this trifecta ensures that that all interventions in the areas of development and sustainability are long-term and effective. Within these broader areas, we look at specific processes and tailor make them to suit needs of the field. We have further categorized our offerings into

Certificate Programs

Management Development Programs & Certificate Programs & Management Development Programs

Immersion Programs

Illustrated below is an image of the types and customizations possible with our capacity building programs –



STRATEGY CERTIFICATION	Sustainability / CSR, Frugal/Reverse Innovation Management, Economic & Inclusive Growth Strategy Design Shared Economy & Circular Economy Strategy Development Emerging Markets & Global Value Chains Strategies
IMPLEMENTATION CERTIFICATION	Shared Value Playbook Development & Project Implementation, Management Development Programs in Business with Government, Design Thinking, Business Model Canvas & Value Proposition Design
EVALUATION CERTIFICATION	GRI and other sustainability reporting, Competitiveness & Industry Future-scaping Assessments, Social Implementation & Monitoring

CERTIFICATE PROGRAMS & MANAGEMENT DEVELOPMENT PROGRAMS

CERTIFICATE PROGRAMS & MDPs Blended Programs with Theoretical and Practical Inputs	ASPECTS COVERED

TIME PERIOD	1 DAY	3 DAYS	3 DAYS
STRATEGY CERTIFICATION	Design Thinking, Stakeholder Mapping, Need Assessment	Design Thinking, Stakeholder Mapping, Need Assessment, Participation, Participatory Rural Appraisals & Rapid Resource Appraisals	Design Thinking, Stakeholder Mapping, Need Assessment, Participation, Participatory Rural Appraisals & Rapid Resource Appraisals, Logical Framework Analysis, Field Based Strategy Inputs
IMPLEMENTATION CERTIFICATION	Resource Mapping, Social Engineering, Community Based Problem Solving	Resource Mapping, Social Engineering, Community Based Problem Solving, Leadership Development, LFA Analysis with implementation, Field Based Inputs	Resource Mapping, Social Engineering, Community Based Problem Solving, Leadership Development, LFA Analysis with implementation, Field Based Inputs, Project Design and Resource Allocation, Predicting Timelines, GAANT Chart Time Management
EVALUATION CERTIFICATION	Basics of Social Impact Evaluation	Social Impact Evaluation, Community Based Evaluation, Community Engagement in Monitoring and Evaluation	Social Impact Evaluation, Community Based Evaluation, Community Engagement in Monitoring and Evaluation, Field Based long term imaging, Predicting Project Utility, Social Audits

IMMERSION PROGRAMS

TCSC's immersion programs are blended offering with theoretical and practical inputs from various stakeholders working closely in the areas of business, economic development and sustainability. We integrate access to basic resources with economic, environmental and social sustainability in identifying our partners as well. TCSC's immersion program is titled SEVA which is the Sanskrit term for service. It expands into Society, Environment, Values and Attitudes and is an attempt to ensure that management development students are integrated into the world of sustainability and social development.

SEVA is a compulsory course for the first-year management students at TAPMI and we provide an opportunity for immersion students to work closely with TAPMI students for the desired period of time. Immersion programs are tailormade to suit the needs of the students. Students are exposed to theoretical aspects of development in India, field based orientation, involved in problem-solving, stakeholder engagement and in cultural immersion as well. Students leave with an in-depth understanding of Indian systems and structures and of practical problem solving at the field level.

TAPMI
(A constituent unit of MAHE, Manipal)

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