



Social Innovation Online Hackathon (SIOH) 2020

Final Report



Initiated by:

Keio University India Japan Laboratory (IJL), Japan
Resilience Innovation Knowledge Academy (RIKA), India



In cooperation with:

IIT Roorkee, IIT Hyderabad, VNIT Nagpur and NIT Durgapur

June-August 2020



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Video on SIOH is available at:

https://www.youtube.com/watch?v=-vYMRP9Ew7o&feature=youtu.be&fbclid=IwAR3aMXwsgpJcYSCGQHGAL-8157s2oJr7r6l_rOAtWcwLUk8cr6yrv_9JP28

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Core Team Members

- Ranit Chatterjee, Co-founder, RIKA India Pvt Ltd
- Vibhas Sukhwani, PhD. Student, Keio University, Japan
- Sukhreet Bajwa, Project Manager, RIKA India Pvt Ltd
- Ambika Dabral, Project Manager, RIKA India Pvt Ltd
- Jeevan Madapala, Research Scholar, IIT Roorkee, India
- Krishnakali Ghosh, Project Officer, RIKA India Pvt Ltd
- Satsuki Shioyama (Monitoring and Evaluation), RIKA Intern

Core Professors

- Rajib Shaw, Professor and Director, India Japan Laboratory, Keio University, Japan
- Rodney VanMeter, Professor, Keio University, Japan
- Mahua Mukherjee, Professor, IIT Roorkee, India
- Kotaro Kataoka, Associate Professor, IIT Hyderabad, India
- Sameer Deshkar, Assistant Professor, VNIT Nagpur, India
- Sujoy Saha, Assistant Professor, NIT Durgapur, India

डॉ. पी. के. मिश्र
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Dr. P. K. Mishra
Principal Secretary to Prime Minister



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MESSAGE

HE Ambassador Hirabayashi, HE Ambassador Verma, Professor Murai, Mr. Matsumoto, Dr Rajib Shaw of Keio University, senior members from Japan Business Federation and FICCI/ ARISE, colleagues, and dear students.

Greetings!

I would like to congratulate the institutions and individuals who have come together to organize this Social Innovation Online Hackathon. When we talk about innovation, we often consider it to be related to science and technology, and their applications. However, it is equally important that we explore innovations in the realm of social and economic processes. After all, even the application of technology is for the greater social good. As the world grapples with the COVID-19 pandemic, it is clear that "out of the box" thinking is key to addressing the challenges humanity faces in the 21st century.

I am happy that this initiative brings together the energies of young students and researchers to apply their knowledge, ideas and skills to develop innovative solutions that address real life problems. I would particularly like to commend the efforts of students as well as their mentors who have continued their work even during these difficult times.

Our recently launched National Education Policy 2020 (NEP) lays particular emphasis on the development of the creative potential of each individual. So, in a way this initiative also advances the objectives of NEP.

Finally, I am delighted to note that this initiative brings together institutions from India and Japan. This is an example of the mutual goodwill that our two countries, their people and institutions enjoy. I hope we can continue to work together and implement some of the ideas generated here for the benefit of our people.

I wish you all a very successful event. Thank you.

P.K. Mishra
[P.K. Mishra]

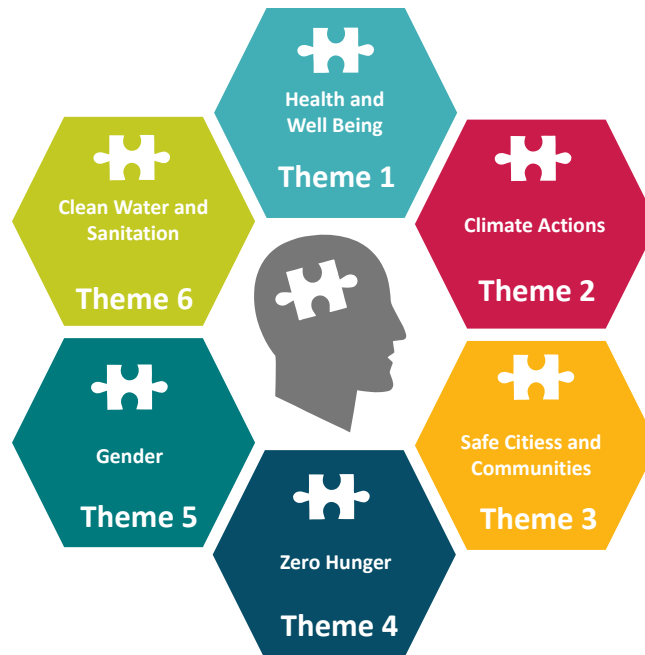
Overview of Social Innovation Online Hackathon 2020

1. Background

The coronavirus pandemic brought the world to a standstill due to suspension of services, travel and governments imposing lockdown to various degrees. Government, private sector, NGOs and communities alike are grappling to tackle the challenges and future uncertainties the pandemic has brought into our daily lives and livelihoods. While there is a heightened effort to find a vaccine and antiviral treatment, but probably it will take some time. Till then we live with an uncertain future. That is why we created this online hackathon: to unite innovators, mission-driven entrepreneurs, experts, and developers in finding unique solutions for tackling the issues of pandemic and future disasters to make the society resilient and sustainable.

2. Themes of the Hackathon

Six themes are chosen for the hackathon, linked to SDGs (Sustainable Development Goals). These are zero hunger (SDG 2), health and well-being (SDG 3), gender (SDG 5), clean water and sanitation (SDG 6), safe cities and communities (SDG 11), climate action (SDG 13). The themes are chosen to help participant aligning their thoughts to look for specific problems. But having said that, the themes shouldn't be limiting conditions for letting one's imagination take wings. Further, it is also important to realize that these themes can exist as standalone themes or can be merged with one another to have a multisectoral interdisciplinary approach. These are some suggested themes, which can be considered. However, if there are some new proposed themes, those can also be incorporated.



3. SIOH in Numbers



4. Team building

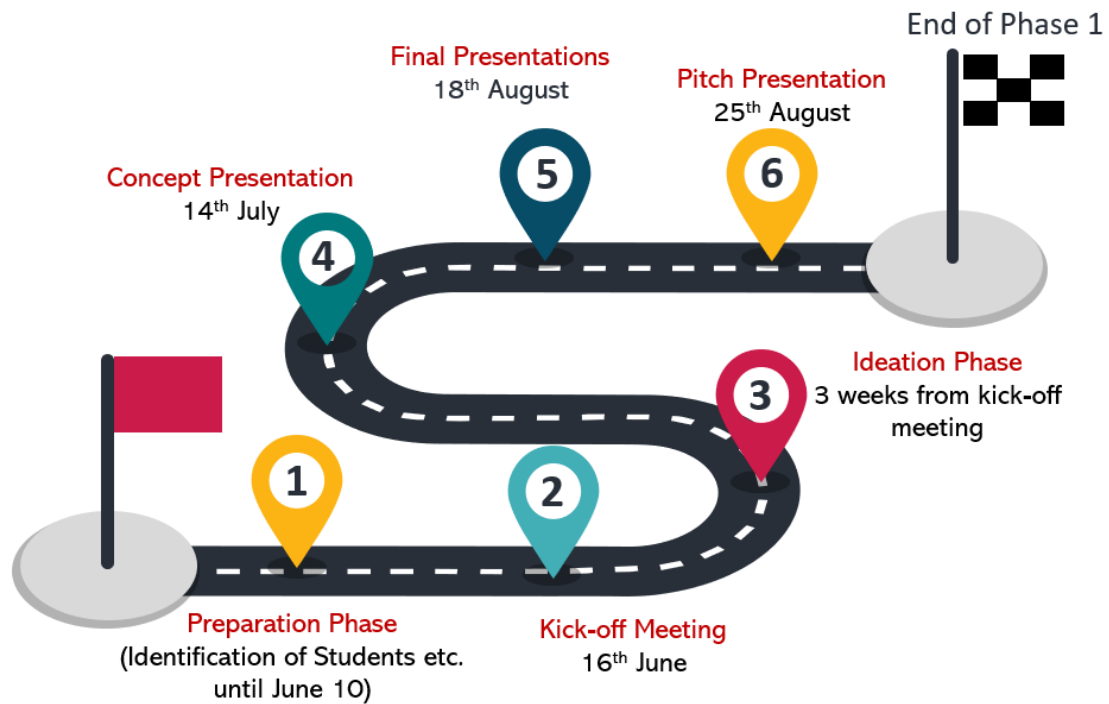
Each of the team was comprised of 1-2 students from the participating institutions. Ideally, it would be a group from different disciplines like architecture, planning, disaster management, computer science and application, urban studies, policy studies etc. Each team identified two co-leaders. Students were from 2nd year UG up to master and some PhD students.

5. Process



More emphasis should be put on developing implementable solutions. One key focus area could be addressing livelihood related issues, with multi-disciplinary themes varying from labor, workspace, sanitation, water, food etc.

6. SIOH Road Map



Prototype development phase and marketing strategy development phase will depend based on the theme and individual ideas, which will continue beyond 25th of August 2020.

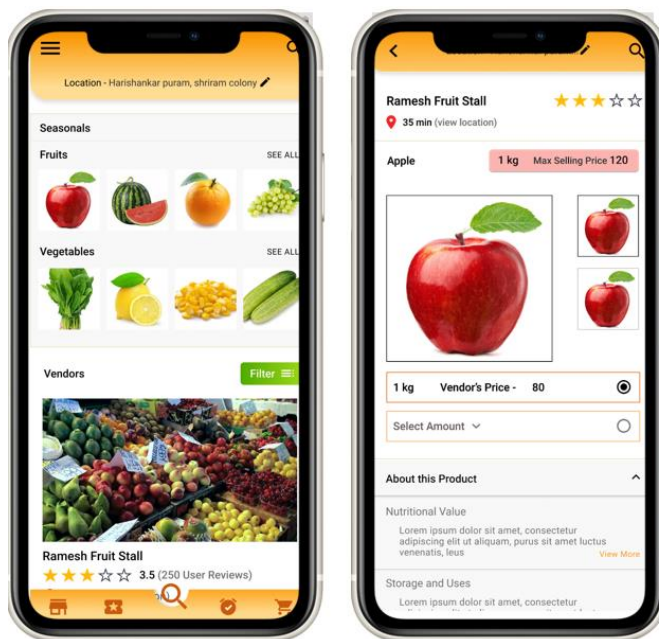
SIOH Thematic Ideas developed by student participants

Thematic Group: Zero Hunger (SDG 2) Freshivo, the food you can trust



Description of Social Innovation Idea

The pandemic situation has created a lot of uncertainty in the market. Among all the sectors, food industry was one of the worst hit sector which not only led to wastage of food but loss of many livelihoods as well, especially for the street sellers, cart sellers, etc who are most adversely affected mainly due to the obliviousness to hygiene and then due to the trust issues on consumer end. Street-sellers are a part of the fabric of the Indian society. They are not only found in every corner of every city but also provide food at low-cost to the millions in every city. However, with the recent COVID-19 crisis, this group of people has been facing severe income and food insecurity issues which also has a ripple effect on the millions that rely on them. With the idea of 'If you Give a Man a Fish, You Feed Him for a Day and if you Teach him To Fish, and You Feed Him for a Lifetime' we want to create a sustainable environment for unorganized sector wherein the people can work and earn their own food, be independent and have pride in their work during the COVID times as well as post the COVID times.



Through our app *Freshivo*, we intend to connect the street vendors directly to their consumers. Through our platform the buyers can check out the nearby sellers, the products they are offering, the quality of their products (via ratings made by other consumers), the prices as well as the hygiene they maintain and go on to make informed decisions. The sellers on the other hand get to reach out to the customers and attract them by showcasing the quality of their products via photographs

and the hygiene they maintain. Through this idea we intend to empower the street sellers which form a large part of our informal economy by helping them reach out to potential consumers. Moreover, for the people who want to avoid going to crowded places to do their shopping, our solution seems ideal since we would offer them alternative places to go to (hence, decongesting places that could lead to the spread of the virus in the current scenario)

Business Model & Revenue Generation

Investment Required		
Pilot of Phase I, 4 Zones 100 sellers, 300+ buyers	Lac. ₹	USD \$
Application development cost	3.50	4700
Marketing & Human Resource	1.50	2000
Launching costs	0.50	700
Incentives (<i>Vendors and Consumers</i>)	2.00	2700
Legal and Professional	1.00	1400
Miscellaneous	1.50	2000
TOTAL	10.00	13500

Expected Recovery		
Pilot of Phase I, 4 Zones 100 sellers, 300+ buyers	Lac. ₹	USD \$
Ad-space (<i>on app and on-cart</i>) ₹8,000 - 30,000/-	0.80	1100
Vendor Subscriptions (<i>20% profits from the app.</i>)	0.20	300
TOTAL	1.00	1400

Practical Implementation

The app is easily scalable at a low cost. There is no restriction on number of users. The app can respond to market changes quickly. The app benefits both customers and vendors. The app is sustainable in nature as it caters to day to day business requirements. The network effect of marketing and growth from smaller local areas makes this business easy to scale up and adapt to changes in the market providing low cost solutions and sustainability in long term.

Prototype: <https://www.figma.com/proto/J2IYJZ4A7SxHS7EKoQ6KMf/FreshKart?node-id=62%3A677&scaling=scale-down>

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	Shreya Joshi	VNIT Nagpur	Urban Planning	PG/ 2nd year
2	Kimaya S Patil	IIT Roorkee	Architecture	B. Arch 3rd year
3	Daev Mithran	IIT Hyderabad	Physics	B-tech 4th Year
4	Vijay Parmar	VNIT Nagpur	Chemical engineering	UG 2 nd year
5	Shweta A. Rokade	VNIT Nagpur	Architecture	UG/4th year
6	Vajire P Kishanrao	IIT Hyderabad	Computer Science & Engineering	B-tech 2nd Year
7	Dev Chopra	Keio University	Environment and Information	UG / 2nd year
8	Shaimay M Shah	Keio University	Environment and Information	UG / 2nd year

Thematic Group: Health & Well-Being (SDG 3)

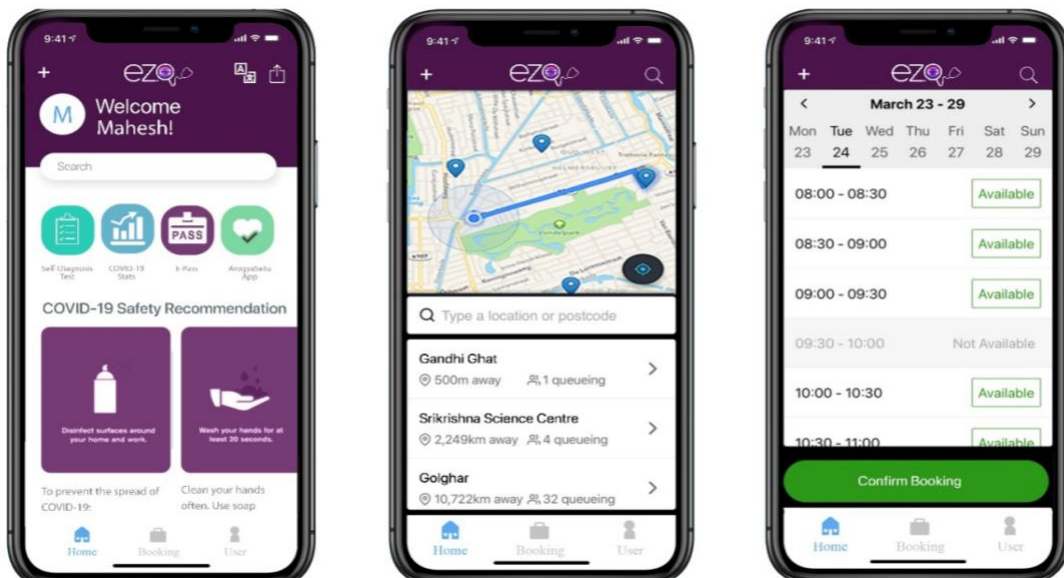


eZQ, Queue Management App for COVID-19 Test Centres

Description of Social Innovation Idea

The COVID-19 Pandemic has greatly affected all of our lives. Especially in the case of India, there are serious concerns over overcrowding at COVID test centers. Daily increased symptomatic patients call for the increased number of testing centers and its proper management. Currently, India is facing overcrowding and improper management at most of the testing centers.

Our aim is to create an app with an easy user interface which could avoid people standing in long queues to get tested. An app where people can search for hospitals nearby, then they can select a hospital and virtually enter into a queuing system. They will be provided a token number according to the priority concerns, whose live status will be received as a text message to them. And they can safely go to the hospital and get themselves tested. At the same time, the hospital management can view the live status of the queue and can update the changes in case of any delays on their side.



The features of the applications provide the necessary data for managing the online queue prioritizing the patients according to the severity of the individual case. In the initiation phase, Patna (Bihar) will be the pilot city for the application.

Business Model & Revenue Generation

Application Development Costs	5,400 USD
Application Maintenance Costs	4,000 USD
Marketing and Product Advertisement	2,700 USD
Total Costs/Investment Required	14,800 USD or 11,00,00 INR

Monthly Revenue from Advertisements	135-250 USD
Monthly Revenue for 1 Test Center	2085 USD
Monthly Revenue for 5 Test Center	104285 USD
Total Revenue per Month	10,560 USD or 8,00,000 INR

Practical Implementation

As a future potential, we believe that our application can be scaled to a larger size, extending to different cities, and making it applicable for nationwide use. Furthermore, the app has potential to be used like existing queueing apps, for medical practitioners and hospital facilities. In terms of adaptability, we believe that this application can be adapted to managing COVID vaccination queues. The app could even be extended to other diagnostic services post-COVID. In terms of sustainability, governments and public hospitals can manage data of the online queues and facilities to monitor inventories and assure transparency of health infrastructures in a state or region. We look forward to revenue generation by charging 1% of the service charges, offering subscription services to private hospitals and ads on the app for private hospital firms.

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	P V S Prathyusha	IIT Hyderabad	Biotechnology	M-tech 2nd Year
2	Abhishek Palit	IIT Roorkee	Architecture	M.Arch 1st year
3	Sooraj Sharma	IIT Roorkee	Disaster Mitigation and Management	M.Tech 1st year
4	Aishwarya Narang	IIT Roorkee	Disaster Mitigation and Management	PhD
5	B.Sonali Patro	VNIT Nagpur	Chemical engineering	UG 2 nd year
6	Arikta N. Kamble	VNIT Nagpur	Architecture	UG/ 4th Year
7	Haru Sato	Keio University	Environment and Information	UG / 3rd year

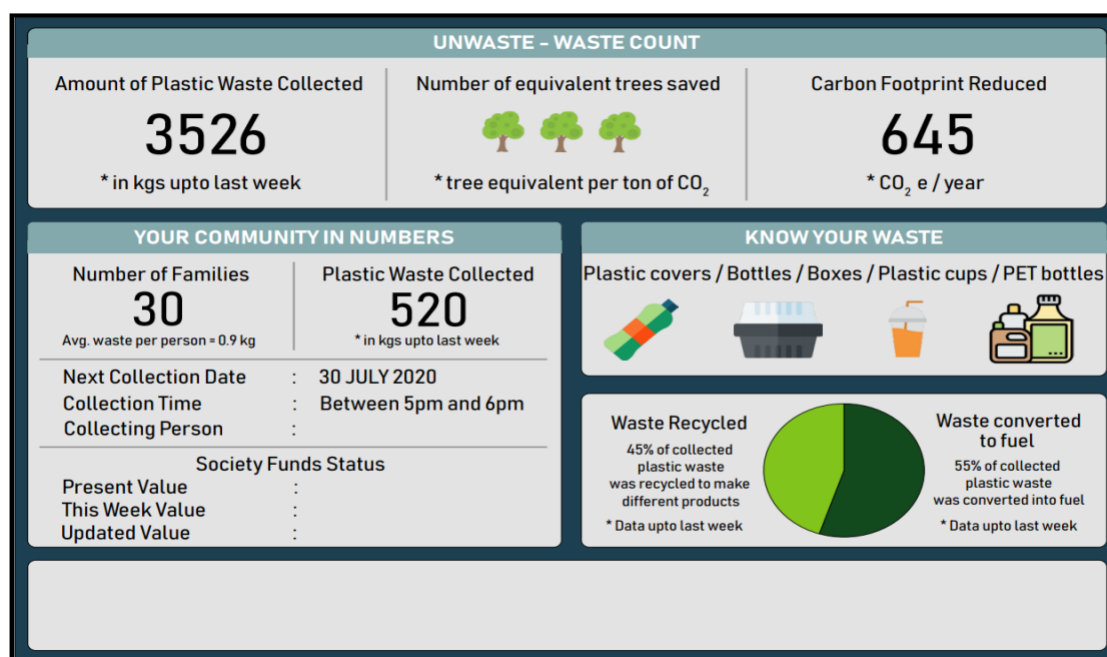
Thematic Group: Climate Action (SDG 13)



Unwaste, Make your contribution countable

Description of Social Innovation Idea

Plastic accounts for 8% of the total solid waste generated in the country annually. Out of the 26,000 tonnes of annual plastic waste produced in India (the 15th biggest plastic producer), 94% possess the ability to be recycled about 7-9 times, being thermoplastics. Over 10,000 tonnes of plastic waste remains uncollected. Improper waste segregation is a key contributing factor to the wrongful disposal of recyclable plastics. The plastic waste generation is expected to rise and a robust collection and segregation strategy while maintaining a sustainable approach is the utmost need of the hour.



Our key social innovation idea features website and app development with a focus on plastic waste segregation at source, build community network and create sustainability index. Through this website, waste segregation at source will be promoted. The features of public communication and awareness programs are included to explain the benefits of this initiative. Plastic waste collected by the existing waste disposal system will go into the mega bins provided by us for each block. The weekly collection and sourcing to recycling sites will also generate employment opportunities. The industries will be provided with green ratings, based sustainability indexing. The consumers will be notified via the platform regarding the waste collection and provided monetary benefits in the form of coupons and points which can be redeemed at e-commerce

markets. The 'Unwaste' initiative has a sustainability index of 0.95 on the scale of 0 to 1. The project will first pilot at IIT Hyderabad campus. Phase 1 focuses on 30 families and phase 2 will scale up to 500 families. The mission is to expand to 3000 families in 14 months as part of phase 3.

Business Model & Revenue Generation

Phase 0 (4 months)			Phase 1 (6months)		
Marketing	INR 20,000	270\$	Installation	INR 1,25,000	1690\$
Maintenance Cost	INR 80,000	1080\$	Workforce	INR 14,000	190\$
			Marketing	INR 7,000	95\$
			Maintenance	INR 80,000	1080\$
Total	INR 1,00,000	1350\$	Total	INR 2,26,000	3050\$

- Total Investment Required for first two phases is - Rs 4,76,000*/- (6420\$).
- Phase 1 is expected to have a monthly cash flow- Rs 12,500/- (170\$)
- The Break-even Point is expected to be generated at 15th Month

Practical Implementation

The idea assumes a linear ascension as the scale increases, provided the baseline is app mediated. In implementing our idea to the current state of India, we aim to create a feasible model on a small scale, and hope to increasingly implement it onto a larger scale (within India), keeping in mind the social sustainability. Specific parameters may be tweaked based on the region of application at a later stage, apart from the basic framework.

Prototype: <https://web.sfc.keio.ac.jp/~t19573kj/exercise%20directory%20/userpage.html>

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	S. Sandilya	IIT Hyderabad	Chemical Engineering	B-tech 3rd Year
2	Md Bilal Shaikh	IIT Hyderabad	Chemical Engineering	UG
3	T Pavan Kumar	IIT Hyderabad	Chemical Engineering	UG
4	Pranjal Agrawal	IIT Roorkee	Architecture	B.Arch 3rd year
5	Khushi Jhaveri	Keio University	Environment and Information	UG / 1st year
6	Miyu Inoue	Keio University	Policy Management	UG / 2nd year
7	Divyajyoti Biswal	VNIT Nagpur	Chemical Engineering	PhD
8	Laxmi Zadgaonkar	VNIT Nagpur	Chemical Engineering	PhD

Thematic Group: Clean Water & Sanitation (SDG 6)



GROW ON (Connect to change) Social Innovative App for Urban Farming

Description of Social Innovation Idea

The ongoing COVID-19 pandemic has highlighted the vulnerability of our systems to unforeseen natural shocks and uncertainties. The outbreak and its consequent spread across the globe have pushed the entire world into a serious crisis, reinstating the need for guaranteed access to water, food security and sanitation for all. While 70% of freshwater globally is used for agriculture, major proportion of food is consumed in urban areas. In reference to the growing concerns of water stress from a water-energy-food nexus perspective, our solution emphasizes on water conservation through practice of urban farming which requires only 5% of total water consumed by existing agriculture. Through our mobile application 'Grow on', urban farming is encouraged and made easy. To overcome the existing challenges of lack of awareness, high capital investment, maintenance etc, our app provides personalized suggestions on cropping variety, knowledge feed by experts from allied fields, monitoring of efficiency levels and amount of produce, and a platform for trading (produced vegetables and greens). Most importantly, it creates a platform to connect the producers and consumers, and also for the people to sell and buy food produce.



Business Model & Revenue Generation

Expenditure into App development	
User profile management	Rs. 1,80,000
Multi language support	Rs. 37,500
Social platform	Rs. 1,50,000
Advertising feature	Rs.1,05,000
App data analytics	Rs. 1,50,000
Trading fragment	Rs. 1,87,000
Total Costs/Investment Required	8,00,000 - 9,00,000 INR

Pilot Phase - 4 Months	PHASE 1 (2 Years)	PHASE 2 (2 Years)
<ul style="list-style-type: none"> 30-50 active users from Home Crop Evaluation of app Promotions through referrals, Workshops and NGO activities. Identification of potential consumers 	<ul style="list-style-type: none"> App development Active user base of 7000 installations. 150 School and 2 RWA installations. In app purchasing, add and affiliate marketing. 10% annual rise in user base 	<ul style="list-style-type: none"> Link up with restaurant chains and food supply markets. Induce delivery system. Revenue from sales commissions and data monetization. 13.56% annual rise in user base.

- Breakeven point will be 3 to 5 years from Phase 1.
- ROI From breakeven point 5% to 10%

Practical Implementation

The idea implementation in phases is intended to incorporate the changing user needs and market fluctuation. Linking up with food chain groups after phase 1 (2 to 3 years) will also open up new business opportunities. With support from local governments, the idea can be scaled up to more extent and by renting lands for urban farming. The core idea of our solution is to enhance urban farming, which can adapt even in crucial market conditions and liabilities. Also, this is cost-driven model business idea where the costs are minimized wherever required and to run the service in efficient way. The diversified and multi sided platform with wide range of customer segments will sustain the idea for long period.

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	Abhishek. C.	VNIT Nagpur	Architecture	UG/ 4th Year
2	Girish Devireddy	VNIT Nagpur	Architecture	UG/ 4th Year
3	M. Ruchith Rao	VNIT Nagpur	Architecture	UG/ 4th Year
4	Anugya Singh	IIT Bombay	Civil Engineering	B.Tech 3rd year
5	Aastha Sinha	IIT Roorkee	Architecture	B.Arch 3rd year
6	Keitaro Ikeda	Keio University	Policy Management	UG / 3rd year
7	Rohan Singh	NIT Durgapur	Computer Science & Engineering	UG/ 3rd year
8	Suraj Modi	NIT Durgapur	Computer Science & Engineering	UG/ 3rd year

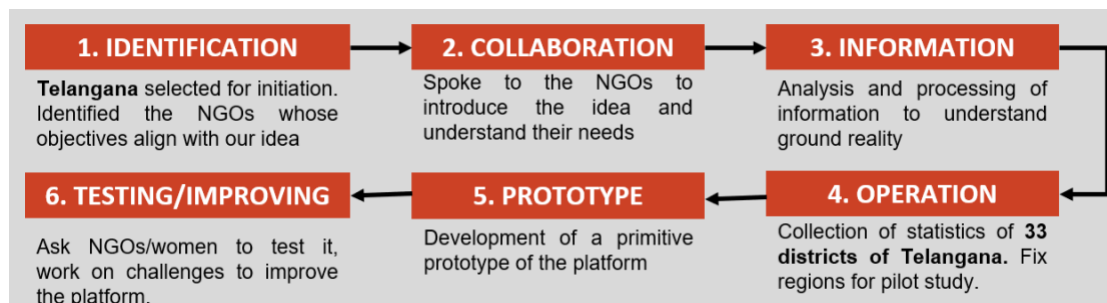
Thematic Group: Gender (SDG 5)



“UDITI” – A PAN India Online Platform for women with multiple functionalities

Description of Social Innovation Idea

India is a patriarchal society where women are being subjected to inequality, harassment, abuse in all sectors of life- economic, education, occupational, health and survival. The ongoing COVID-19 pandemic has also exposed how rooted structural imbalances are between rural and urban, male and female, rich and poor, even in the digital world. During the pandemic, chances of domestic violence and abuses have reportedly increased to tenfold. Post-Covid, gender-based inequalities are only expected to get worse. The key problems we are trying to address here are financial dependency, low financial exposure, lack of awareness especially regarding abuse and sex education. The Indian Government and NGOs have for long been working towards various forms of women empowerment, but their reach and success rates are still limited. As multiple resources for the empowerment of women exist, our idea is to reduce the digital divide and help these resources reach their targeted stakeholders. For the pilot case of Telangana state in India, our platform will bring the government and NGOs together and help them to reach people across the country with a specific focus on the empowerment of underprivileged women.



Dynamic; Multiple Functionalities; User friendly; Customizable; Multiple Languages

STAKEHOLDERS	UNIQUENESS	SOCIETAL BENEFITS
<ol style="list-style-type: none"> 1. Mainly Women from urban and rural settings with direct or indirect access to the internet. 2. NGOs 3. Venture Philanthropists 	<p>Not just a technical solution but a holistic approach for the “empowerment of women”</p>	<ol style="list-style-type: none"> 1. Show women ways to be independent, seek help from the right sources and be aware. 2. Create a better world with woke men and women



Business Model & Revenue Generation

Cost of Operations
Cost of Website Maintenance (Rs 18K) + Cost of NGO Registration (Rs 15K) + Marketing , HR Costs (Rs 45K) + Rs 8000 (Fluctuation cost)
Source for raising the money
1) The venture Philanthropy Model 2) Corporate Social Responsibility 3) Crowd-Funding and Impact Investing - Depends on Publicity and Marketing 4) Affiliate Marketing - Rs 50K (Only in Phase 2) 5) Money through Monetization - Rs 160K - 450K (We will only calculate Income from Monetisation)
ROI (per annum) - Revenue - Cost of Operation
ROI (Phase 1) = Rs (160K - 450K) - (85K) = Rs (75K - 365K) ROI (Phase 2+) = Rs (210K - 500K) - (95K) = Rs(115 K - 405K)
<ul style="list-style-type: none"> • Investment required for Phase 1 - Rs 85K • Investment required for Phase 2+ - Rs 95K

Practical Implementation

The implementation will be starting off as a website, to be developed into an app which can operate in the offline mode letting people access the information available which does not require internet connection. The app will also include a Crisis Mode that can send information offline (like SMS). The spectrum of our target groups will broaden with time and so will the functionalities. Like for example, we intend to provide full-fledged Blockchain Data Storage. Other features like personalized e-wallets without linking to bank accounts, storing personal records like credits and assets, Conditional Cash Transfer etc. could also be integrated to our platform. In the long term, the website development and maintenance charges can be balanced or over weighed by the revenue generated through monetization.

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	Alekhya Madanu	IIT Hyderabad	Engineering Science	B.tech (3rd year)
2	Dasari Shree Ujjwal	IIT Hyderabad	Electrical Engineering	B.tech (2nd year)
3	Saloni Gupta	VNIT Nagpur	Chemical Engineering	B.tech (2nd year)
4	Shreya Shukla	IIT Roorkee	Architecture	M.arch (1st year)
5	Vinjam Lakshmi Sai Vignatha	IIT Hyderabad	Engineering Science	B.tech (3rd year)

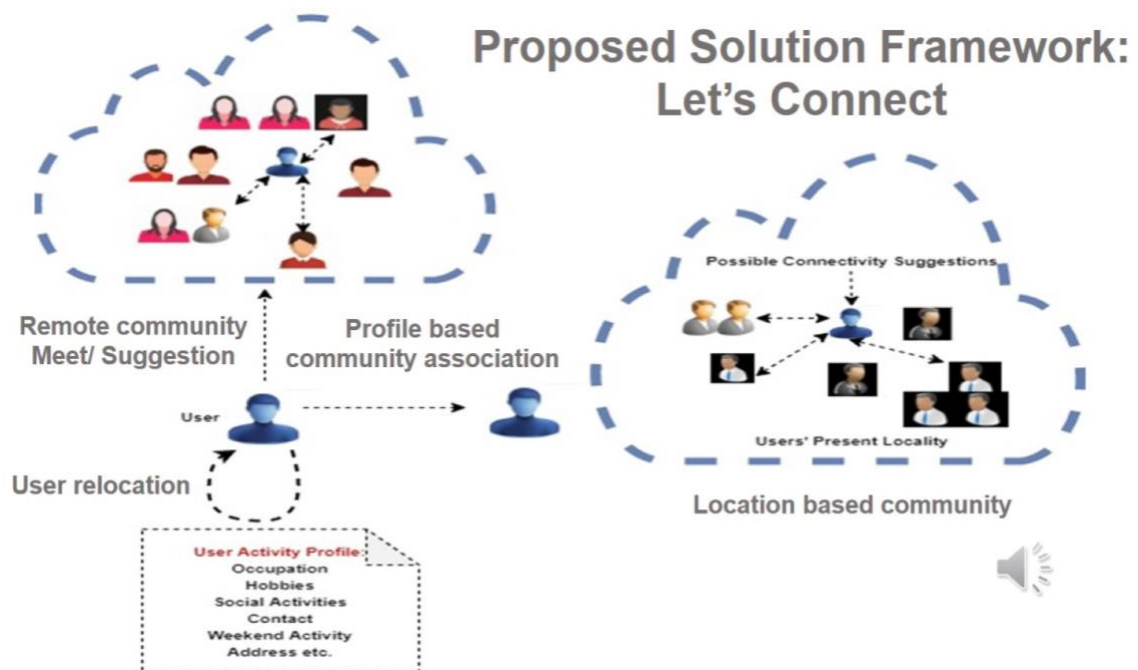
Thematic Group: Safe Cities & Communities (SDG 11)



APNAPAN

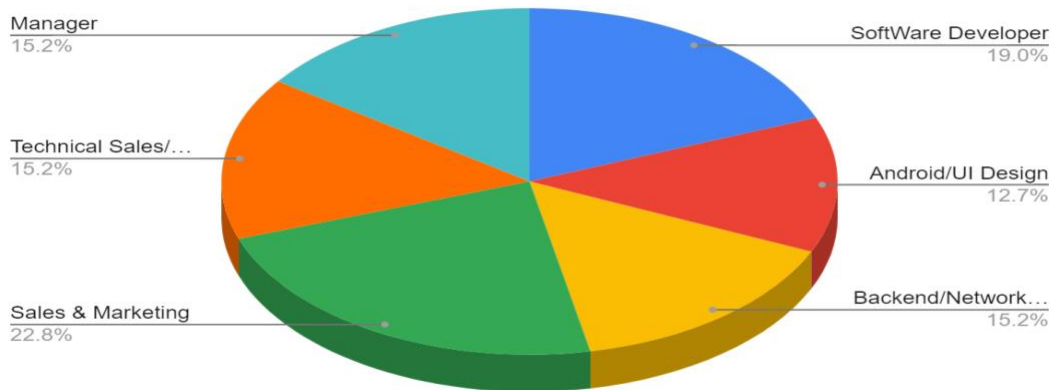
Description of Social Innovation Idea

Invention of the internet was a major breakthrough in human history. It changed us a lot, since it blurred the boundaries and from the local we became global. It stretched our virtual boundaries but at the same time it shrunk our physical reach. Now we can have a friend who lives in some other country, but the fact remains that we don't know who lives next door to us. A local community can greatly benefit our wellbeing and can increase our contentment in day-to-day life. As we get older, it can sometimes get harder to connect with the people around us. But, that connection will ultimately ease stress and feelings of loneliness, especially during these adverse times. Knowing our neighbors can also serve people for knowledge sharing and emergency situations like disasters, thefts etc. Through our preliminary surveys, it was found that 4 out of 10 people knew little about their neighbors, and 9 out of 10 people wanted to know more about their neighbors. In view of that, our team thinks that we can potentially overcome these issues by introducing an app called "Apnapan" which tends to be a location based app that will help people to connect with people and spaces nearby. The prime motive of this solution is to connect people with their neighborhood. Other apps like NextDoor and My Coop have previously been implemented to achieve this purpose, but there are limited platforms on the Indian context. With that background, we are aiming for a dynamically orientable connected community with special emphasis on the principles of mental wellbeing and inclusivity.



Business Model & Revenue Generation

The pilot deployment of our app would be in Gariahat Region in Kolkata, India, with an estimated Community Base of 50,000 people. The initial investment required for a period of 6 months would be INR 1,020,000. The cost breakup is explained in the below figure:



The key source of revenue generation from our app are through validation of user profiles, transactions on Freelancers Availability, Locality Based Marketing, and Requirement based Product Advertisements.

Practical Implementation

Once initially deployed the platform will be scaled up through staged rollouts. The platform is highly adaptive to the requirements of the market as it primarily focuses on the informal sector. Based on the informatics provided, the startup will be self-sustaining within six months of the initial investment. The unique selling point of our proposed solution is that it provides a social platform for communication in the neighborhood/locality. It can potentially serve for addressing a range of community issues, promoting social gatherings and interactions, encourage people to participate in physical activities, and can also serve for emergency aid.

Team Composition

No.	Student Name	University Affiliation	Expertise	Program / Year
1	Swaraj Pramanik	NIT Durgapur	Computer Science & Engineering	UG/ 4th Year
2	Tamal Mandal	NIT Durgapur	Computer Science & Engineering	PhD
3	Hemant Sarraf	NIT Durgapur	Electrical Engineering	UG / 3rd year
4	Sunny Gupta	VNIT Nagpur	Urban Planning	PG/ 2nd year
5	K. Surya Prakash	IIT Hyderabad	Electrical Engineering	B-tech 2nd Year

APPENDIX 1

Kick-off meeting Agenda 16th June 2020

Time (IST)	Time (JST)	Program
14:30-14:35	18:00 -18:05	Opening and introduction: Rajib Shaw, Keio University
14:35-14:45	18:05-18:15	Remarks from Jun Murai, Keio University
14:45-14:55	18:15-18:25	Remarks from Kamal Kishore, National Disaster Management Authority (NDMA)
14:55-15:05	18:25-18:35	Remarks from Katsuo Matsumoto, Japan International Cooperation Agency (JICA)
15:05-15:15	18:35-18:45	Remarks from Raj Srivastava, Deputy Chief of Mission, Embassy of India in Japan
15:15-15:25	18:45-18:55	Thematic overview of Hackathon: Ranit Chatterjee, Resilience Innovation Knowledge Academy (RIKA) India
15:25-15:35	18:55-19:05	Thematic inputs: Takuro Takeuchi, JICA
15:35-15:45	19:05-19:15	Thematic inputs: Brig. B. K. Khanna, FICCI/ ARISE India
15:45-15:50	19:15-19:20	Comments from university: Mahua Mukherjee, IIT Roorkee
15:50-15:55	19:20-19:25	Comments from university: Sameer Deshkar, VNIT, Nagpur
15:55-16:00	19:25-19:30	Comments from university: Sujoy Saha, NIT, Durgapur
16:00-16:05	19:30-19:35	Comments from university: Kotaro Kataoka, IIT Hyderabad
16:05-16:10	19:35-19:40	Comments from university: Rodney van Meter, Keio University
16:10-16:15	19:40-19:45	Comments from industry and policy: Yukio Takeyari, IJL, Keio University
16:15-16:25	19:45-19:55	Comments and questions
16:25-16:30	19:55-20:00	Next steps
16:30	20:00	Closure

APPENDIX 2

Concept Presentation Agenda 14th July 2020

Time (IST)	Time (JST)	Program
		(Each Thematic Group will have 20 minutes: 7 minutes Presentation + 13 minutes Q/A)
		Opening and Introductory remarks
15:00-15:20	18:30-18:50	Thematic Group 1: Health and Wellbeing
15:20-15:40	18:50-19:10	Thematic Group 2: Climate Actions
15:40-16:00	19:10-19:30	Thematic Group 3: Safe Cities and Communities
16:00-16:20	19:30-19:50	Thematic Group 4: Zero Hunger
16:20-16:40	19:50-20:10	Thematic Group 5: Gender
16:40-17:00	20:10-20:30	Thematic Group 6: Clean Water and Sanitation
		Closing Remarks

APPENDIX 3

Mid-term Presentation Agenda: 31st July 2020

Time (IST)	Time (JST)	Program
		15 minutes for each Thematic Group (5 minutes Presentation + 10 minutes open Q/A from all participants, including students)
		Opening and Introductory remarks
15:00-15:15	18:30-18:45	Thematic Group 1: Health and Wellbeing
15:15-15:30	18:45-19:00	Thematic Group 2: Climate Actions
15:30-15:45	19:00-19:15	Thematic Group 3: Safe Cities and Communities
15:45-16:00	19:15-19:30	Thematic Group 4: Zero Hunger
16:00-16:15	19:30-19:45	Thematic Group 5: Gender
16:15-16:30	19:45-20:00	Thematic Group 6: Clean Water and Sanitation
16:30-17:00	20:00-20:30	Internal Meeting between the University Professors, Mentors and Committee Members <i>(All student members will be asked to exit the session)</i>

APPENDIX 4

Final Presentation Agenda: 18th August 2020

Time (IST)	Time (JST)	Program
		15 minutes for each Thematic Group (5 minutes Presentation + 10 minutes open Q/A from all participants, including students)
		Opening and Introductory remarks
15:00-15:15	18:30-18:45	Thematic Group 1: Health and Wellbeing
15:15-15:30	18:45-19:00	Thematic Group 2: Climate Actions
15:30-15:45	19:00-19:15	Thematic Group 3: Safe Cities and Communities
15:45-16:00	19:15-19:30	Thematic Group 4: Zero Hunger
16:00-16:15	19:30-19:45	Thematic Group 5: Gender
16:15-16:30	19:45-20:00	Thematic Group 6: Clean Water and Sanitation
16:30-17:00	20:00-20:30	Internal Meeting between the University Professors, Mentors and Committee Members <i>(All student members will be asked to exit the session)</i>

APPENDIX 5

Final Pitch Event Agenda: 25th August 2020

Time (IST)	Time (JST)	Program
12:30-12:40	16:00 -16:10	Opening and welcome: Rajib Shaw , Professor, and Director, India Japan Lab, Keio University and Co-Founder, RIKA Short video presentation: Ranit Chatterjee , Co-Founder, RIKA
12:40-12:45	16:10-16:15	Remarks from Jun Murai , Professor, Keio University
12:45-12:50	16:15-16:20	Remarks from HE S. K. Verma , Ambassador of India to Japan
12:50-12:55	16:20-16:25	Remarks from HE Hiroshi Hirabayashi , Former Ambassador to India, and President, The Japan India Association
12:55-13:00	16:25-16:30	Remarks from Kamal Kishore , Member, National Disaster Management Authority
13:00-13:05	16:30-16:35	Remarks from Tsuyoshi Nagano , Chairman, Tokio Marine Holdings and Co-chair, Committee of Start-up, Keidanren (Japan Business Federation)
13:05-13:10	16:35-16:40	Remarks from Nirankar Saxena , Deputy secretary General, FICCI (Federation of Indian Chamber of Commerce and Industries)
13:10-13:30	16:40-17:00	SIOH Pitch 1 (5 minutes presentation, followed by 15 minutes Q/A)
13:30-13:50	17:00-17:20	SIOH Pitch 2 (5 minutes presentation, followed by 15 minutes Q/A)
13:50-14:10	17:20-17:40	SIOH Pitch 3 (5 minutes presentation, followed by 15 minutes Q/A)
14:10-14:15	17:40-17:45	Remarks from Katsuo Matsumoto , Chief Representative of JICA India Office
14:15-14:20	17:45 -17:50	Remarks from Raj Srivastava , Deputy Chief of Mission, Indian Embassy in Japan
14:20-14:25	17:50-17:55	Remarks from potential sponsors
14:25-14:30	17:55-18:00	Closing remarks
14:30	18:00	Adjourn

APPENDIX 6

Participants (Final Event)

Indian Embassy in Japan (3)

- HE S. K. Verma, Ambassador
- Raj Srivastava, Deputy Chief of Mission
- Gaurav Gupta, Second Secretary

The Japan India Association (2)

- HE Hiroshi Hirabayashi, Former Ambassador to India, and President, The Japan India Association
- Tatsuo Nishimoto, The Japan India Association

NDMA (National Disaster Management Authority) (1)

- Kamal Kishore, Member

Embassy of Japan in India (4)

- Kazuhiro Kiyose, Counsellor, Economic Section
- Mizuho Hayakawa, Counsellor, Cultural Section
- Kiyoshi Kurihara, First Secretary, Economic Section
- Satoshi Takagi, First Secretary, Economic Section

JICA (Japan International Cooperation Agency) (3)

- Katsuo Matsumoto, Chief Representative of JICA India Office
- Takuro Takeuchi, Director, South Asia (India), JICA HQ
- Noriko Sakurai, JICA India Office

Keidanren (Japan Business Federation) (5)

- Tsuyoshi Nagano, Chairman, Tokio Marine Holdings and Co-chair, Start-up Committee
- Mitsuru Izumo, President, Euglena Corporation and Co-chair, Start-up Committee
- Makoto Takahashi, President, KDDI and Co-chair, Start-up Committee
- Noboru Saito, Executive Corporate Officer, Japan Unisys
- Gen Shintani, Tokio Marine Holdings

FICCI (Federation of Indian Chamber of Commerce and Industries)/ ARISE (3)

- Nirankar Saxena, Deputy secretary General
- Brig. B. Khanna, Advisor, ARISE
- Mainak Mazumdar, ARISE

Yoga Organization of Japan (1)

- Kazuaki Ohashi, Vice chairman

SDG Choupal (1)

- Sandeep Saxena, National Coordinator

Media (2)

- Hiromi Hirose, Ex Delhi Bureau Chief, NHK
- Deepak Dwivedi, Chairman and Editor-in-chief, Dainik Bhaskar Noida

Industries and Business Sectors (8)

- Tetsuya Nakamura, Chief Digital Innovation Officer, Tata Consultancy Services (TCS), Japan
- Prabjot Singh, Digital Transformation Services, TCS, Japan
- Motohiro Nozu, CEO, Nippon Kabaya Ohayo Holdings, Japan
- T. Kishimoto, Teijin Frontiers Co. Ltd., Japan
- N. Fujiwara, Teijin Frontiers Co. Ltd., Japan
- Kazuya Saginawa, Co-Founder, Bitgrit, Japan
- Sarafraz Petkar, Bitgrit, Japan
- Arunabh Mitra, Chief Continuity Officer, HCL Technologies, India

UN, International and Multilateral agencies (3)

- Sanjay Srivastava, Chief, Disaster Risk Reduction, UN ESCAP (UN Economic and Social Commission for Asia Pacific)
- Animesh Kumar, Deputy Head, Regional Office for AP, UN DRR (UN Office for Disaster Risk Reduction)
- Chand Kaushal, Head, ICT, UNTIL (UN Technology Innovation Lab)

Hackathon Mentors (13)

- Aslam Perwaiz, Deputy Executive Director, ADPC (Asian Disaster Preparedness Center)
- Rustom Modi, Sr. Advisor at AWR Lloyd
- Sanjeev Sinha, Partner, India-Japan Partnership Fund
- Shivangi Chavda, Project Coordinator, The Global Network of Civil Society Organizations for Disaster Reduction
- Amit Paul Babu, Principal Consultant, BNA Technologies
- Neha Midha, Programme Officer, UNESCO
- Abhiyant Tiwari, Assistant Professor, GIDM (Gujarat Institute of Disaster Management)
- Repaul Kanji, Research Scientist, GIDM (Gujarat Institute of Disaster Management)
- Animesh Prakash, Assistant Manager & Project Lead, Oxfam India
- Homolata Borah, Assistant Professor, Delhi University
- Indradeep Singh, Professor, IIT Roorkee, India
- Sudip Roy, Associate Professor, IIT Roorkee, India
- Saptarshi Kolay, Assistant Professor, IIT Roorkee, India

Universities (11)

- Jun Murai, Professor, Keio University, Japan
- Kazuto Ataka, Professor, Keio University, Japan
- Rodney VanMeter, Professor, Keio University, Japan
- Rajib Shaw, Professor and Director, India Japan Laboratory, Keio University, Japan
- Yukio Takeyari, Member, India Japan Laboratory, Keio University, Japan
- Akiko Kato, Member, India Japan Laboratory, Keio University, Japan
- Manoranjan Parida, Professor and Deputy Director, IIT Roorkee, India
- Mahua Mukherjee, Professor, IIT Roorkee, India
- Kotaro Kataoka, Associate Professor, IIT Hyderabad, India
- Sameer Deshkar, Assistant Professor, VNIT Nagpur, India
- Sujoy Saha, Assistant Professor, NIT Durgapur, India

Core team members (7)

- Ranit Chatterjee, Co-founder, RIKA India Pvt Ltd
- Vibhas Sukhwani, PhD. Student, Keio University, Japan
- Sukhreet Bajwa, Project Manager, RIKA India Pvt Ltd
- Ambika Dabral, Project Manager, RIKA India Pvt Ltd
- Jeevan Madapala, Research Scholar, IIT Roorkee, India
- Krishnakali Ghosh, Project Officer, RIKA India Pvt Ltd
- Satsuki Shioyama (Monitoring and Evaluation), PhD. Student, Kyoto University, and RIKA Intern