Corporate Social Responsibility

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India 2022 Report



IBM India CSR Policy & Focus Areas

Corporate citizenship

IBM has developed a thoughtful, comprehensive approach to corporate citizenship that we believe aligns with IBM's values and maximizes the impact we can make as a global enterprise. We focus on specific societal issues, education & skills, Climate Protection and Sustainability.



CSR policy

- IBM believes that a company culture based on core values not only helps our business, but also defines the role that we can and should play in society;
- We identify and act upon new opportunities to apply our technology and expertise to societal problems.
- We scale our existing programs and initiatives to achieve maximum benefit.
- We empower our employees and others to serve their communities.
- We integrate corporate citizenship and social responsibility into every aspect of our company.



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Focus areas

Our CSR focus areas has been:

 Education and Skills - To foster life-long learning opportunities through streamlined initiatives that cut pathways across education [access], skills/employability [inclusion], and employment [equity and quality].



- Sustainability and Climate Protection- IBM has long been committed to protecting the environment. We will continue to drive reductions in our environmental impacts and apply our leading technology innovations and expertise to address global environmental challenges
- Volunteerism The company's culture of giving continues to attract and inspire employees dedicated to improving the lives of others through skills volunteering.

CSR Committee

Mr. Amit Sharma

Chairman

Mr. Sandip Patel

Member

Ms. Tejaswini S Rajwade

Member

Mr. Thiru Nagarajan

Member



Program Report

Nurturing STEM and Workplace Skills for the New Collar Economy.

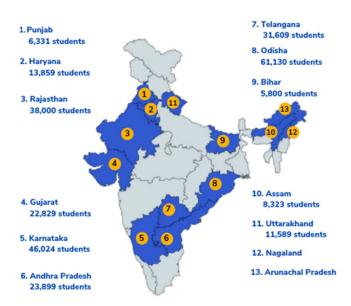
IBM has a focused approach to closing the STEM skills gap and preparing the workforce for new collar careers. In addition to collaborating with universities that offer specific computer coursework, IBM is taking a multi-pronged approach to skilling the next generation of tech workers. We work with constituents from the school level to undergraduate level through appropriate education and skilling programs that equip our youth with the requisite skills to access careers of their choice. We approach this through public / private partnerships and aligned Ngo's which connect classroom, college and career skills and training. IBM also runs an apprenticeship program, which provides intensive onthe-job training for those breaking into the world of IT and who come from socio economically deserving backgrounds.

Education

STEM for Girls India

STEM for Girls India (SFGI), initiated by IBM, and implemented by AIF and Quest Alliance, aims to improve education in an increasingly technologically advanced world. According to Cracking the Code: a UNESCO report, globally representation of women in science, technology, engineering, and mathematics has been much lower than men.

Only 35% of STEM students in higher education are women. SFGI aims to address the low representation of women in STEM and reduce the gap between women pursuing higher education in STEM and taking up a career in STEM. The program not only ensures a STEM-based curriculum delivery but also seeks to address the gender bias and stereotypes by actively engaging the parents, teachers, and the state. The program also connects students with women pursuing a career in STEM to provide effective mentorship and create awareness of career opportunities in STEM. In its mission to promote women in technology, SFGI seeks to build on the components - Computational thinking through Coding, Life and Career skills, Digital Literacy, Gender education and building personal agency. The program implementation is based on an SFGI module for each level (Level 1 and Level 2), aimed at creating a gender – aware foundation to enhance technical skills, and thereby increase the chances of employment for women in STEM.



Outcomes and Activities under SFGI Activities Sr. No. Outcome Developing 21st Century 1 Module Implementations Skills in schoolgirls Project Making and Share out STEM Awareness amongst teachers and students STEM Pathway Teacher / HM orientation Teacher Awareness and Capacity Building Teacher – led sessions Goverment liaison Sensitization of Stakeholders on STEM **Education for Girls** Community Engagement Role Model Interaction (RMI) Career Posters NIRMAN Webinar 5 Career Awareness and Choices NIRMAN Calls Career Day Event Career Corner 6 Refurbishment of ICT Computer Repair

Labs

Key Highlights of the program

Curriculum/Module Implementation

1. STEM Activities

To engage students' interest in STEM – based activities and build their understanding and conceptual knowledge on various topics, students are encouraged to learn by building projects, under the guidance of school facilitators. A total of 5754 projects were made across the four states, and the total number of students participating in the project making are 26559 students.

2. Advocating Awareness and Sensitization:

Sensitization of the school system to build awareness around inclusive practices to promote girls in technology is vital to SFGI program. SFGI teams conduct meetings with various stakeholders from state government and members from the community to strengthen girls' agency in pursuing education and building strong careers. The team conducted meetings with the District Education Officers (DEO), to give updates on the program. School Facilitators conducted community visits with parents and panchayat members addressing issues such as gender stereotypes, importance of higher education for girls and building awareness on STEM – based careers. 493 Interaction were done with Government Officials in 2021-22 and 50586 Interactions were done with communities over physical visits or via calls.

3. Advanced Coding Curriculum:

43 facilitators in Andhra Pradesh, Telangana and Karnataka were trained in an Advanced Coding curriculum. A 5-day boot camp model focussed on concepts and practises of mobile app building and hardware integration, which was later taken to students. Building mindsets of active citizenship was a focus area, apart from concepts and practices around advanced coding.

4. Career Game

A browser-based game, called Career Quest, was built that models career decision-making and focuses on skills required for the same. It talks about tools required to make informed and well-rounded decisions. Making choices, taking decisions, and role model engagement during real life challenges are at the core of the game. The game is currently available in English, and is being translated into Telugu, Kannada, Hindi, Ahomiya, Odia, and Gujarati.

Role Model Interaction:

Role Model Interaction sessions were organized to inspire students to build strong career paths on STEM – based careers. Role – models shared their journey and challenges that they met with in reaching their goals. Students had the opportunity to interact with the role – models and ask questions towards the end of the session. Broader category of field of which Role Models were invited across the states are:

SFGI conducts role model interaction time to time to motivate students to ignite a desire in them to become like them in future. The mode of conducting Role Model Interaction was Virtual as well as Physical and the count for the same were 42 and 101. Virtual interaction reached 3255 school across the four states and Physical Interaction reached 106 schools. The total number of students participated in both mode of interaction were 39545 Students. A total of 187 role model interactions were attended by 45538 students, across 7 states. Role models discussed career pathways, and ways to overcome challenges, including gender stereotypes. More than 75% of the students (out of those submitted their feedback) rated 4 or 5 for the RMIs they were part of and 80% of the students shared they were inspired by the RMIs, learnt something and that these helped them to think more about their career choices. Only 67.13% of the students were aware of various career options available for them in the initial phase of the RMIs, which is now 76.81%. The RMIs held in Karnataka were appreciated by the Department of KREIS. The same were hosted for all schools under the department through a YouTube channel. Similarly, in Gujarat a statelevel YouTube channel was used for live broadcasting of RMIs, as well as webinars on career.



Teacher capacity building (including MasterCoach for Teachers)

One of the main objectives of the IBM STEM for Girls program is to empower teachers and involve them closely in the intervention schools to engage/train students on computational thinking, STEM, and agency development for girls. All three states engage teachers and headmasters in co-creating relevant education materials to progress computational thinking and 21st century skills development at secondary and higher secondary school level. 1660 teacher trainings were organised in Punjab, Haryana, Rajasthan, and Uttarakhand. 7330 teachers were trained in Assam, Gujarat, Nagaland and Odisha. Teacher training focused on themes such as self-awareness in classrooms and on virtual platforms, sensitivity to COVID and gender barriers and STEM mindsets.



Teacher capacity building Teacher training in Nagaland

Project share out day and Career Day event

Project share out day and Career Day event was organized in 327 schools in Punjab, Haryana, Rajasthan, and Uttarakhand. 2687 students have showcased their projects in these events. A Career Exploration Week was organized in Andhra Pradesh and Telangana, in collaboration with Nirmaan. A series of 4 webinars were conducted with an objective to create awareness on themes like education, career, jobs, industries, study choices after 10th grade, as well as alternate career pathways and legal employment. We recorded 1700+ views on YouTube across the states

PICO Satellite launch

While the team on field takes regular sessions with students and teachers, there is also a need to expose the students to advanced technology wherein they can actually participate, learn and demonstrate their ability to prepare and launch projects which can be showcased at national level and will thus hugely impact the confidence and curiosity of young students. In order to bring in innovation in the project, integration of developing of Pico Satellites and Drone by students in this program. Students from 130 intervention schools of Uttarakhand were selected based on the exam. These selected students participated in the virtual training program to understand the Satellite and Drone technology.

The focus is on the following objectives:

- Students to learn about satellites, drones and space technology.
- To promote the aspiration for higher education in STEM subjects and space technology.
- To provide hands-on experience in assembling satellites and drones.
- To create awareness about the STEM careers and develop confidence and problem-solving skills.

In total, 5,214 students participated in the virtual orientation program and 3188 interested students appeared in the exam. Based on the exam, 135 students were selected, who attended 13 virtual training sessions in which they were taught about the operation of Satellite and Drones, avionics, structural materials, selection of payload, electronic power system, designing and analysis software knowledge. One-day workshop was organized for the students in which they assembled Drones and Satellites. Students got this hands-on experience for the first time, which made them more curious towards understanding the new technologies and their functionalities. After the workshop program, a launch event was organized; in which selected students, teachers and principals from different schools participated. The event was inaugurated by State Project Director, Samgra Shiksha Abhiyan. During the virtual training and workshops the students were closely evaluated by our technical partner and 4 students were selected for the upcoming Rocket launch project of Space Zone India. Since the closure of the project, we have been receiving appreciation from principals, teachers and parents.



Collaboration with Department of Science and Technology (Vigyan Jyoti)



https://voutu.be/PUrEe-WxwY4

Vigyan Jyoti, an initiative to encourage girls to take interest in science and build career, was launched by the Department of Science & Technology (DST) to create a level-playing field for meritorious girls to pursue STEM. It had been running successfully in 58 Jawahar Navodaya Vidyalayas (JNV) since December 2019 and has now been expanded to 200 JNVs for the year 2022-23. As a first step, the programme has commenced at school level for meritorious girls of Class IX to Class XII. The objective is to encourage and empower them to pursue STEM courses in reputed institutions of the country.

IBM has forged a partnership with Navodaya Vidyalaya Samiti (NVS) as an extension to IBM's flagship programme "STEM for Girls" running in 13 states to create a robust STEM ecosystem that creates critical thinkers, problem-solvers, and next generation innovators through MANAK- a program targeting to build one million ideas rooted in science from school students. The partnership aims at strengthening the Vigyan Jyoti programme running successfully in Jawahar Navodaya Vidyalayas. DST and IBM India aim to work together to further integrate and develop Science & Technology in the education ecosystem with short term course, workshops, mentoring, and online science content communication for teachers and students in India.

Vigyan Jyoti Outreach (Partnership with DST)

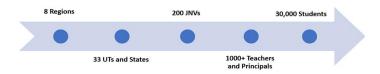
Vigyan Jyoti is being implemented in partnership with American India Foundation.

Program Outreach:

The Programme is currently running in 8 administrative regions of NVS, covering 33 States and Union Territories, targeting 30,000 students from 200 Jawahar Navodaya Vidyalayas. Due to the current situation of Pandemic, the team has been successfully engaged in connecting to the Students and Teachers through virtual platforms. The consistent efforts of the team and other stakeholders enable the programme to fulfill its objectives and impart maximum knowledge to the students.

Major Activities undertaken under Vigyan Jyoti Project are:

- Teachers Training
- Students' Workshop
- Code-a-thon
- LMS Platform
- INSPIRE-MANAK Awards



Teachers' Workshop for Science Projects



Teacher training is an essential part of Vigyan Jyoti. Two workshops in January 2021 were organized for 32 shortlisted teachers. First, to create innovative Science projects for grades of XI and XII and the second one, to assist teachers in the efficient use of technology for a better teaching-learning experience.

The teachers used their expertise in their respective STEM subjects in creating innovative projects and quizzes that infuse the young minds with curiosity and creativity and further their interest in the field of STEM. The teachers submitted 38 projects of all STEM subjects, which were refined and standardized by the AIF team one by one and 34 projects were finalized for implementation. The projects are being compiled in an e-Book to be used by the teachers in all the JNVs for implementation and reference.

Teachers' training for basic computer training - Hyderabad region

An online Teachers' training workshop for basic computer skills was conducted in two phases in the month of March for the teaching and non-teaching staff of the NVS Hyderabad region, an initiative taken by Deputy Commissioner, NLI, Rangareddy. A need-based assessment was conducted based on which the training module was designed (2 hours each day).

Group	Workshop Dates	No. of participants	Topics covered
Beginner	8-10 Mar, 21	92	MS Word, MS Powerpoint, Gmail, GDrive, GMeet, Google Forms, Kahoot
Intermediate	22-24 Mar, 21	98	Kahoot, Data handling, Data Analysis, Jamboard, Certificate generation, PPT to Video

The teachers were engaged in the training through a step-by-step live demo, warm-up activities and daily assignments. The team had prepared handouts for each of the workshops. Separate video snippets explaining the steps were created and shared with teachers during the workshops. Pre- and post-workshop tests were conducted to analyze the learning curve and feedback form at the end of each phase. Apart from this, pre-reads to prepare before the workshops were also provided. The participants showed immense enthusiasm in learning, observing and most importantly practicing through assignments.

ATL Workshops for teachers

Under the Atal Innovation Mission, Atal Tinkering Laboratories have been setup across schools in the country to foster curiosity, creativity, and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, and physical computing among students. However, it was learnt that certain concepts of the ATL modules were new to a majority of teachers and hence, a training on ATL for teachers to make optimal use of the available ATL resources was conceptualised to compliment the larger vision of Atal Innovation Mission. These workshops are aimed to equip the teachers with skills and knowledge needed to teach design thinking and setting challenging experiments more effectively, using learner centred innovative approaches.

The workshop was organized by American India Foundation, with the support of IBM India and Navodaya Vidyalaya Samiti and was conducted by the technical experts from Vikram A Sarabhai Community Science Centre, Ahmedabad.

ATL Workshop for JNV teachers is an 18-hour online workshop spread across 6 days and covers sessions on basic electronic components, basic circuit designing, Arduino, sensors and actuators, Artificial Intelligence & Coding, 3D printing and much more. Six workshops were conducted region-wise to cover approximately 240 teachers from 120 selected JNVs. Pre and post workshop assessment are conducted to assess the impact of the training. The teachers are also assigned with individual project during the course of the training.

Activity	Workshop Plan
Target Group	JNV ATL Schools Teachers
Number of Workshops	6 workshops of six half days each
Number of participants	Up to 40 teachers in each workshop
No. of beneficiary schools	120 JNV schools
Workshop mode	Online mode supported by hands-on activities and resource materials

The ATL workshops have been conducted for JNV teachers from Lucknow, Patna, Jaipur, Chandigarh, Hyderabad, Pune and Bhopal regions in 5 batches. A total of 182 teachers from 97 schools have participated in the workshop. The participants are provided with a link to the Pre-Assessment form before the workshop and Post-Assessment feedback form at the end of the workshop. Feedbacks of the participants with regard to the training methodology, content and information are noted and a detailed analysis is documented.

Cybersecurity workshop for students

Four Sessions on Cybersecurity were held for the students of Jawahar Navodaya Vidyalaya of the eight regions to increase their awareness on different aspects of Cyber-security and brief them about issues such as cyber-bullying, cyber-threats, breach of privacy, phishing, etc. The total number of participants for all the live sessions were 1517 from 8 regions, Bhopal, Chandigarh, Jaipur, Luknow, Hyderabad, Shillong Patna and Pune.

IBM Employees, Ms. Guncha Malik, Compliance Leader-IBM and Ms. Vandana Verma, Security Architect-IBM and Ms. Prajakta Tendulkar, Senior Staff Software Engineer, IBM were trainers and resource persons. The speakers explained to the students how to secure their devices, usage of strong passwords, restriction of access from public networks, geo-tagging, stranger-danger, hacking, over-sharing & cyber-theft and securing online accounts. The sessions aimed to keep the students safe and make them cyber-safety conscious. The sessions were interactive and the students participated enthusiastically.

Science Camp



A series of STEM workshops were organized for class X students of JNVs based on science curriculum. The Science Camp commenced with a two-day Science Festival, and was followed by weekly C-STEM (curriculum- based STEM) sessions. With a reach of 5000 students from 100 JNVs across the country, the Science Camp saw a wonderful response from the students and teachers alike.

Science Festival

The Science Festival took place on 8th and 9th July 2021 in which more than 2800 students of Jawahar Navodaya Vidyalaya's participated. It was a two-day edutainment event filled with fun science activities, demonstrations, career talk and many other activities.



Launch of Science Festival

The festival was launched by Shri Vinayak Garg, Commissioner, Navoday Vidyalaya Samiti. The inaugural ceremony was felicitated by dignitaries such as Mr. Manoj Balachandran, Head CSR, South Asia, IBM; Dr. Vandana Singh (Scientist-E, DST and Program In charge), Sh. T. Gopalakrishna (DC, NLI RR & Project Coordinator, VJ), Dr. Minu Singh, Ms. Tejaswini Rajwade, CFO, IBM, Mrs. Sanyukta Chaturvedi (Director, DE, AIF)

The ceremony also saw the launch of the flipbook on Science Projects designed by teachers of NVS. A number of activities for the students were conducted by the partner organization (ScienceUtsav) that kept the students engaged and inculcated in them a budding mindset for Science and Technology.

C-STEM Workshops



https://youtu.be/a4SG9JXddj0

From July 2021 to February 2022, 20 C-STEM Workshops were conducted for students of class X of JNVs on various topics of science and technology as prescribed by the CBSE syllabus. Conducted in two terms, the workshops were attended by 3841 students overall. The workshops were designed and conducted by Science Utsav with support from AIF.

The workshops were immersed with a plethora of tinkering experiments, demonstrations, discussions, hands-on activities and research-based activities. The students interacted through YouTube live chat during the sessions by asking questions or answering the questions asked by the presenter.





Students attending C-STEM Sessions



Sparkle Series

In a focused effort to get young higher secondary girl students from remotest parts of the country excited about STEM, AIF in collaboration with IBM India and the Centre for Creative Learning at the Indian Institute of Technology Gandhinagar (IIT-GN) started the 'Sparkle Series' on January 22, 2022, an online interactive education programme for 10,000 Vigyan Jyoti scholars of class 11 from 200 Jawahar Navodaya Vidyalayas (JNVs) across the country.

Sparkle Series consisted of 9 sessions on Mathematics, Science, and Computational Thinking with theith the objective to unlock the hidden mysteries, beauty, and magic of these subjects around us. The sessions contain activities with paper, vegetables, playing cards, musical instruments, different types of whistles, bicycles, etc., based on the curriculum topics in science and mathematics. The idea is to discover the inherent beauty of the subject and get a sense of wonder with various hands-on projects and open-ended questions.

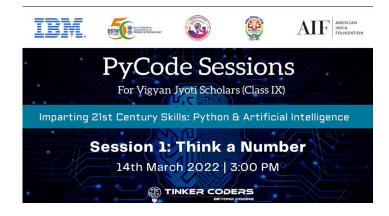
Highlights of Sparkle Series

- A pre-assessment form was shared with the students to understand the base of their learning curve which was attempted by 1448 students.
- More than 4000 students have attended the sessions and there was enthusiastic participation of students during the sessions.
- Assignments were provided after every session which helped the students to enhance their cognitive abilities and the assessment shows that more than 60% of the students have a clear understanding of concepts.
- Post sessions, teachers have shared various project activities done
 by the students through emails and WhatsApp which showed their
 conceptual clarity of the topics they have learned. AIF and CCL
 teams did regular assessments of these projects.
- A post-assessment will be shared with the students for evaluating the impact of the Sparkle Series and assessing the overall understanding of the content covered during the sessions.
- A feedback form has also been shared with the teachers for understanding their views on the content, the learning experience of the students, logistics, and inputs for future activities.
- Hall of fame was shown after every session to encourage the participation of students



PyCode Sessions

PyCode Sessions is a series of online classes which are being conducted for Vigyan Jyoti Students of class IX to provide them with exposure to python language which will help them in developing the key 21st-century skills like Logical Thinking, Creativity, Computational Thinking, Critical Thinking, Problem-Solving. The American India Foundation Trust has collaborated with Tinker Coders to conduct this activity for 6000+ students of 148 Jawahar Navodaya Vidyalayas under the Vigyan Jyoti program.



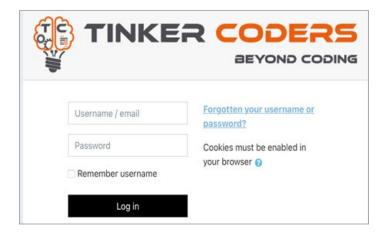
Orientation Session for Teachers & Students:

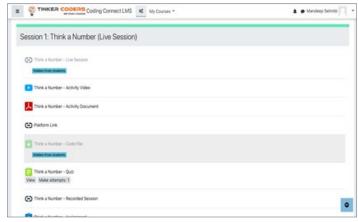
All the participating teachers as well as students were given an orientation about these sessions. The objective of the orientation was to make them aware about the importance of learning Python; the career prospects etc. The students and the teachers were also given a brief on the content of the sessions and were directed on how to use the LMS.

PyCode LMS is an interactive platform where students and teachers can login to watch the live sessions, perform hands-on activities, attempt quizzes and assignments. Individual login accounts for 148 teacher and 6000+ student have been created with different functionalities.

Features of the PyCode LMS:

Teacher LoginStudent LoginTeachers can track attendance and progress of each student from their school in the session.Students can watch the live session through the LMS or the recorded session in case they have missed the live session.They can also grade the quizzes and assignments submitted by their students.They can do hands-on practice of coding.They can do assignments, submit quizzes and projects for their better learnings.A project needs to be submitted at the end of the PyCode sessions.





PyCode LMS shown in the orientation

Code-a-thon

A national-level coding Olympiad called Code-a-thon was conducted for Vigyan Jyoti students in collaboration with HT Media. It was conducted between November 2021 and January 2022, wherein the students got an opportunity to learn programming skills through the topic of website development, along with hands-on experience in building coding projects. To roll out the Olympiad, the following steps were taken:5024 students from JNVs and SFGI schools have registered for the Codeathon. JNV students were registered in 3 batches and SFGI students were registered in one batch. 1405 JNV students participated in the Code-a-thon. The participation was highest from JNV Palakkad, JNV Indore, JNV Rangareddy, JNV Bangalore Urban, JNV Hamirpur from where more than 90% of the students have completed the course. 292 students from SFGI Schools participated in the competition.

After completing the course modules, 623 students with the best performances were selected for participation in a Qualifier round organized on 8th January 2022.



An online finale Olympiad was conducted on 15th January 2021, post the completion of the Code-a-thon Qualifier wherein the top 120 students from Navodaya Vidyalaya Samiti and 30 students from SFGI schools participated in the Finale Olympiad.

Code-a-thon Awards:

Students showing exemplary performance in the competition were awarded various digital gadgets. For the top four students (3 from NVS and 1 from SFGI), laptops were given as the prize. Tablets and smartwatches were given to the runners-up. The student names were announced in the Felicitation ceremony which was held on 20th January 2022.

Numbers of Students participating at different levels of Codeathon

Registration	5024 students (NVS: 4620, SFGI: 404)
Course	5024 students (NVS: 1405, SFGI: 292)
Qualifier (Jan 8)	5024 students (NVS: 545, SFGI: 78)
Finale (Jan 15)	5024 students (NVS: 120, SFGI: 30)
Awards (Jan 20)	5024 students (NVS: 27, SFGI: 11)

LMS Platform

As per the discussions with DST and NVS, it was decided to create an LMS platform. LMS platform is being developed by the technical partner organization of IBM, EduNet Foundation, which acts as a central collaborative ecosystem to efficiently drive, engage and monitor all the stakeholders in the program to provide a qualitative and quantitative view of program outcomes.

It has been developed for administration, reporting and tracking of activities under the Vigyan Jyoti project. The platform allows schools, teacher coordinators and students under the project to be enrolled and plan activities such as Role Model interaction, Knowledge Partner Visit, Science camp, ATL workshop with a particular class, and report data up to student level for the activities conducted. The portal also has a financial module to keep track of the scholarship and expenses incurred for the program by the schools. There is an active forum where teacher coordinators can share their progress or any interesting posts which can be seen and replied to by coordinators across other locations. There is also an active help desk in the form of tickets which are addressed both by the technical and non-technical team. All the above features can be monitored and tracked by a central admin and also on a regional level by the regional admins.

AIF along with IBM and EduNet conducted multiple meetings with DST and the wireframe for the complete development was finalized. Phase 1 of the LMS platform was launched on 2nd March, 2021. During the initial phase the Teacher persona was focused and the school ids were created for the teachers to login. The platform will not only enable monitoring the progress of Vigyan Jyoti at the school level but will act as a resource repository as well. AIF is coordinating with the technical partner for the effective rollout of the platform. Vigyan Jyoti LMS (Learning Management System) was officially launched by the Union Minister.

MESSAGES



I welcome everyone to LMS platform, where one can be enlightened on the Vigyan Jyoti project, a flagship initiative of the Department of Science and Technology, Govt. of India and implemented by Navodaya Vidyalaya Samiti. The LMS has a well-planned information architecture, designed and developed by IBM India and American India Foundation (AIF) with inputs from the Vigyan Jyoti Team. I am confident that in using the LMS, all the stakeholders of Vigyan Jyoti would be able to engage in sound academic learning besides finding relevant solutions to their queries. The smooth facilitation of this platform is the collaborative effort of the technical team at IBM India and AIF, with the support from the Vigyan Jyoti Team at NVS Headquarters. I urge one and all to profit from this platform, being a part of this unique program in the country that aims to provide a fillip to the meritorious girls to pursue higher studies and careers in underrepresented areas of STEM (Science, Technology, Engineering and Mathematics).

Vinayak Garg, Commissioner (NVS)

PARTNERS

IBM is committed to and has always been at the forefront of investing in the empowerment of the students to make them future-ready and increase the global talent pool. As part of this commitment, IBM has partnered with Navodaya Vidyalaya Samiti (NVS) as an extension to IBM's flagship programme "STEM for Girl's "running in 11 states to create a robust STEM ecosystem that creates critical thinkers, problem-solvers, and next-generation innovators in the country. Through this partnership, IBM along with its national implementation partner, American India Foundation aims to bolster the implementation of Vigyan Jyoti programme running successfully in 100 Jawahar Navodaya Vidyalayas reaching 10,000 girl students across the country.







INSPIRE-MANAK Awards



'Innovation in Science Pursuit for Inspired Research (INSPIRE)' scheme is one of the flagship programmes of the Department of Science & Technology (DST), Government of India. The INSPIRE Awards- MANAK (Million Minds Augmenting National Aspirations and Knowledge), being executed by DST with National Innovation Foundation - India (NIF), an autonomous body of DST, aims to motivate students in studying in classes 6 to 10. The objective of the scheme is to target one million original ideas/innovations rooted in science and societal applications to foster a culture of creativity and innovative thinking among school children. Under this scheme, schools can nominate the 5 best original ideas/innovations of students through this website. To promote a STEM mindset in students it was decided to take this scheme to all the SFGI schools in 11 States. A tracker with dashboard has been created to track the progress made by States and partner organizations in enrolling the schools for this competition. The rollout of this competition, Inspire-MANAK in SFGI schools has been divided into the following broad phases:

- 1. Registration of the Schools (SFGI) on the MANAK website.
- Organizing Idea Competition to shortlist 5 best ideas from each school.
- Nomination of the students

Following work has been done to fulfill the objectives of the above three phases:

 Orientation of State Program Managers, School Facilitators and Partner organizations

Orientation sessions for the State Program Managers (SFGI AIF States), School Facilitators (SFs) of the four concerning states viz Rajasthan, Uttarakhand, Punjab and Haryana and SPOCs from Quest Alliance and the Partner Organizations were organized in the months of March and April. They were given the introduction of Inspire - Manak scheme & award and the entire process of selection. They were explained about the three phases in which the program has been planned. They were walked through the website of Inspire MANAK. In addition, they were also explained about the MANAK dashboard that has been created to monitor the progress of the program and enhance its visibility.

2. Registration of the Schools (SFGI) on the MANAK website

The process of registering the schools on the MANAK website have been completed in the first quarter and the status of the number of schools registered (state-wise) is as follows:

Organizing Idea Competition to shortlist 5 best ideas from each school:

State	Total number of schools	Number of Schools Registered
Rajasthan	213	306 (93 new schools)
Uttarakhand	130	130
Punjab	32	32
Haryana	65	65

The second phase of the INSPIRE MANAK is to organize the Idea Competition in the schools to shortlist the best ideas from each school. Owing to the Pandemic, virtual idea competition was conducted across 440 SFGI schools and students were encouraged to participate.



The idea competition was conducted in the schools to get innovative ideas from the students. The students were encouraged to participate in the competition by sharing posters and videos with them and holding role model interaction with a young innovator. With all the efforts, an appreciable number of ideas were received from the students. The status of schools participating in the Idea competition and the numbers of ideas received from the students are as follows:

Numbers of Schools Registered in Each State

State	Total number of schools	Total number of schools participated
Rajasthan	213	151
Uttarakhand	130	128
Punjab	32	26
Haryana	65	61
Total	440	366

No. of schools participating in Idea Competition

A total of 1712 from the above four states were uploaded on the MANAK portal. In addition, a total of 1271 ideas were uploaded by Quest Alliance from the seven states of Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Odisha, and Telangana.

Ideas Qualifying for the District Level Competition: The results for the first round of MANAK competition at the school level have been announced. 230 students have been shortlisted for the next level from the SFGI schools in the four states. Out of these 230 students,183 are girls and 47 are boys.

AIF will be supporting these students with some new initiatives to prepare them for the next level of competition. In addition, a total of 122 ideas have been shortlisted for the district level competition from Quest Alliance from the seven states of Andhra Pradesh, Assam, Bihar, Gujarat, Karnataka, Odisha, and Telangana. To amplify the interest of the students in participating in the Idea Competition and nudge them towards innovations, a role model interaction was conducted with a young innovator named Ms. Digantika Bose. She talked about her innovations and her entire thinking process while developing an innovation. The session reached more than 2000 students.

Hackathons

Hackathons were conducted from January to March 2022. With 108433 students in Ideation across 8 states - KA, AP, Telangana, Bihar, Nagaland, Odisha, Gujarat, and Assam. Our collaborators for the ideation process were Design for change (DFC), while organizations like Beneath tree and Inquilab supported the hackathon process. 283 facilitators and 58 teachers were trained on the Ideatthom process, who in turn led the processes in schools. All the facilitators were hand held by the QA and our collaborators via fortnightly catch ups while the process was implemented on the ground.

Selected 4286 students participated in Hackathon, conducted in 49 Physical camps across 6 states and online mode. 1271 students from 7 states registered for INSPIRE Manak, and 139 ideas were selected at the district level.



Students demonstrating their model in a Hackathon

Scholarships and Sahi Kadam

In collaboration with Nirman's Sahi Kadam, selected students received career support in the form of;

- Guidance and information on various career choices
- Psychometric assessment
- Personal counselling on careers, courses, hostels etc., localized to the students
- Parental counselling as needed
- Assistance in application
- Admission follow-up and needed support

In addition, 284 girls and 147 boys received a cumulative amount of INR 83,77,400 as scholarships.

Research studies

Key insights and a first draft has been completed on the research study on understanding the experiences of the school education system stakeholders on adopting online modes of teaching and learning and the implications therefore, for designing blended learning. The study found that students demonstrated self-learning behaviour to compensate for the loss of learning in the online class. Interestingly, self-learning of interest-based and non-curricular skills and content was met with greater enthusiasm and higher motivation levels than self-learning and engagement with compulsory curriculum subjects, indicating the role of motivation in developing self-learning attitudes.

A study was also conducted on Hackathon processes, and an article was published on the same. The study noted that Hackathon workshops create spaces which encourage students to disrupt the status quo and traverse outside their comfort zones. Emerging as spaces for self-learning, Hackathon has sparked interest in science in many girls who were otherwise sceptical about the subject matter.

AI FOR CBSE: STUDENT AND TEACHER TRAINING PROGRAM

We stand on the brink of a technological revolution that is fundamentally altering the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation is going to be unlike anything humankind has experienced before. The 'Fourth Industrial Revolution' as it is called, is building on the Third, the digital revolution that has been occurring since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres with Artificial Intelligence (AI) at its core.

AI can change the world for the better and the potential for humans to improve the world through AI is endless, as long as we know how to use it. It is therefore important that the current generation (who will be the future workforce) are equipped with the skills to understand and engage critically with AI. There is a need to educate students starting at an early age about how to not just be consumers of AI, but creators as well.

IBM in collaboration with the Central Board of Secondary Education (CBSE) had introduced AI as a skill subject for Grade XI & XII CBSE affiliated schools. IBM has developed a comprehensive "AI for All" curriculum (framework, outcomes, and assessments methods) in partnership with Macquarie University, New South Wales that is being implemented in the CBSE schools with support from Indian implementation partners – Learning Links Foundation and 1M1B Foundation.

The "AI for All" curriculum encourages students from all streams to participate with the aim to build foundational skills of AI in order to make them not just consumers of AI, but creators as well. The program provides intensive training and mentoring along with a suite of global, open online resources for students with pedagogical support for teachers to understand AI and its implications for the world and use it to solve real world problems. The program supports the National Education Policy 2020 - India (NEP) by building innovation mind-set and AI adoption in schools & among students.

IBM – CBSE AI Enabled SDVA
Programate for muder to

The objective of the program in the academic year 2021-22 was to work with CBSE schools to:

- Provide curriculum-based training for teachers to help build foundational skills of Artificial Intelligence (AI) and support implementation of AI curriculum in classroom
- Provide path for teacher professional development and upskilling through 'Teacher Certification'
- To support CBSE in integrating AI into the classroom, so as to create innovative instruction that engages students more deeply and make learning AI more powerful.

Program Outreach & Impact

The AI program has reached out to over 160,000+ students and 25,000+ teachers from 500+ CBSE schools across India in the academic year 2021-22. Program participants have come from across India from the following states - Delhi-NCR, Karnataka, Tamil Nadu, Orissa, Kerala, West Bengal, Andhra Pradesh, Telangana, Maharashtra, Madhya Pradesh, Uttar Pradesh, Rajasthan, Punjab and Assam.

The teacher training involved three-day virtual sessions aimed at familiarizing them with basic concepts, tools and resources required to teach the AI curriculum in their classrooms.

- To support the teacher with the implementation of the curriculum, teacher instruction
- Manuals (guides) were created with a lot of examples and activities that teachers could
- Use in teaching the curriculum in their classroom
- The 3-day training guided the teacher through every unit/chapter
 of the curriculum and the instruction manual and also involved
 them in hands-on activities using the learning tools/platforms
 suggested in the curriculum IBM Watson, Teachable Machine,
 Machine Learning for Kids etc.
- At the end of the training, teachers were made part of on an online (WhatsApp/Telegram) community where they continued to share best practices and support each other through classroom implementation

While the primary focus of the sessions was to train teachers on the IBM AI curriculum and support them in their delivery, the sessions were also an opportunity for teacher capacity development and an avenue to upskill themselves. Teachers were encouraged to take certificate courses online (co-created by IBM along with Mindspark and Macquarie University) post their training with IBM.

Furthermore, as part of the Global Teachers Academy for Digital Technologies by IBM in partnership with Chitkara University, CBSE and 1M1B, 140 teachers were trained as AI Teacher Educators with teachers completing AI project logs. The AI materials were further made available to 10,000+ teachers across India.

The student trainings involved a 2-hour online training on AI concepts and were introduced to IBM SkillsBuild for Students on which they were required to complete the AI Foundations certification. A Problem Solvers Tournament was conducted to drive problem solving using AI among the students. Students submitted their ideas for solving community challenges using AI and the top 100 students were selected for the IBM under 18 internships.

5,000 grade XI & XII CBSE teachers trained, 140 mentor teachers formed

160,000+ students trained & 100 students selected for internships

20,000+ teachers engaged on AI through IBM SkillsBuild and Global Teachers Academy

500+ Schools reached

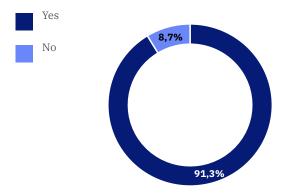
High lists from 2021-22

- All opted as elective subject by 189 CBSE schools
- Focus on **project based learning** using AI for problem solving
- Teachers upskilling through AI Foundation & AI for Educators course on SkillsBuild
- 160,000+ students provided access to IBM SkillsBuild AI Foundations course
- Teacher Instruction Manual, AI Log Book, Sample Capstone Projects, AI Question Banks created
- 100 students selected for **IBM Virtual Internship**



Participant Feedback

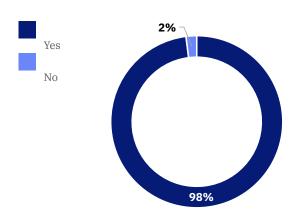
Do You feel Confident to teach AI Curriculum to students post the teacher training?



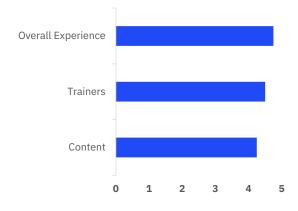
Teachers listed the following as the benefits of participating in the program:

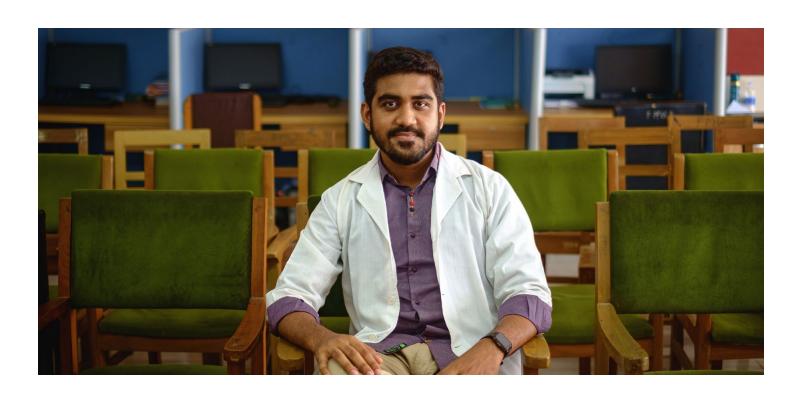
- Learning Next Gen Technology
- Beneficial to learn AI platforms without coding knowledge
- Can monitor and Analyze Student Progress in Real-Time
- It is Convenient and it will improve Student-Teacher Interactions
- Enhance Teaching capabilities

My knowledge of AI has increased (Students)



Average Student Rating



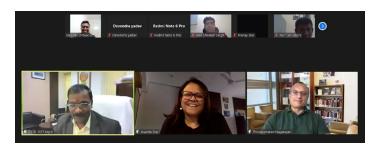


Skills Development

Two-Year Advanced Diploma in IT, Networking & Cloud Computing

IBM in collaboration with Directorate General of Training (DGT), Ministry of Skills Development and Entrepreneurship (MSDE) has been driving its flagship two-year advanced diploma program in IT, Networking and Cloud Computing since 2018. The advanced diploma program started with 5 institutes and has scaled to 16 National Skills Training Institutes (NSTIs) in 12 states across the country while training 453 students from vocational education. The program provides training in the first 18 months followed by 5-month paid internship to provide students with real-world experience of working alongside industry professionals.

In 2021-22, IBM supported paid virtual project-based internship for over 360 students from the program with support from over 130 volunteers from IBM and its channel partners who provided over 2500 hours of mentoring to student teams for their projects. The internship was offered in the following emerging technologies – Artificial Intelligence, Data Analytics and Full Stack Web Development. With collaboration from DGT, the new batch of students will start the program with over 24 NSTIs and 16 states across the country.





Atal Innovation Mission – IBM Collaboration with Atal Tinkering Labs, Government of India

The Atal Tinkering Lab (ATL) initiative is aimed at disrupting the India Education System, creating a paradigm shift where children as young as 12 years of age are being introduced to the world of technology innovation. In order to foster inventiveness among students, ATL conducts different activities ranging from regional and national level competitions, exhibitions, workshops on problem-solving, designing and fabrication of products, lecture series etc., at periodic intervals. IBM partnered with Learning Links Foundation, SRF Foundation, Vikram A Sarabhai Community Science Centre and EZ Vidya (Chrysalis) to support the ATL initiative; this includes a comprehensive strategy that aims to benefit (a) the school, (b) teachers and (c) students.

Trainers conduct workshops and support in training and mentoring the ATL teachers to implement ATL in school effectively. The teachers get training & timely mentoring to implement the ATL Program effectively. Trainers adopt few schools and create a technical experience with students by providing hands-on activities using ATL kits and equipment to promote tinkering so as to instill the spirit of tinkering and project development.

With online teaching becoming the norm due to the lockdown, Taking the lead in making teachers familiar with digital platforms the workshop "Online teacher training" in 2021-22 focused on teaching and maintenance of Atal Tinkering Labs. The course also included training on using Google sites for self-learning. The online teacher training was conducted from 1st June 2021 to 31st August 2021 by IBM in partnership with Learning Links Foundation. The classes were held through video conferencing. Over 3 trainers handled a group of 130 teachers in six live sessions for one and half hours every alternative day, and every webinar was followed by self-learning sessions. For teachers the content were made using google sites and at the end of every topic, an assessment was provided which can ensure the effective learning of the teachers. All the 6 days webinars were supported by self-learning sessions, during these sessions participants were given the links of google sites and also assessment forms to do a self-check their learning's.

Key Highlights:

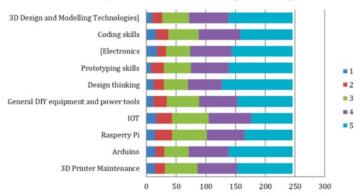
IBM is happy to announce the successful completion of "Online Teacher training workshop" on "ATL", across India. During the whole assignment, there has been a lot of learning, which has triggered many insightful thoughts.

State	Date	Direct Teachers	Indirect Teachers	Female Teachers	Male Teachers	Schools
Pan-India	23/09/2020	52	260	24	28	52
Pan-India	07/10/2020	51	255	16	35	51
Pan-India	21/10/2020	30	150	16	14	30
Pan-India	16/12/2020	53	265	18	35	53
Pan-India	18/01/2021	44	220	16	28	44
Pan-India	08/02/2021	42	210	16	26	42
Pan-India	28/04/2021	41	205	12	29	41
Pan-India	11/05/2021	71	355	25	46	71
Pan-India	25/05/2021	52	260	24	28	28
Pan-India	09/06/2021	77	385	23	54	77
Pan-India	30/06/2021	27	135	7	20	27
Pan-India	02/08/2021	67	335	28	39	67
	Total	607	3035	225	382	607

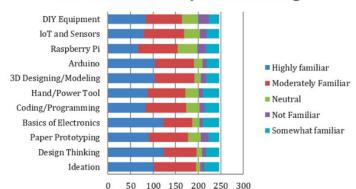
Pre-post training survey:

The retrospective post-then-pre design questionnaire was used for evaluating the teachers' self-reported perceived confidence after completing basic teachers training workshops. There was a noticieable change in the level of confidence of the participants after the training. The post-training survey infers that 98% of the participants felt familiar and confident that they gained the knowledge of ATL tools and technbology.

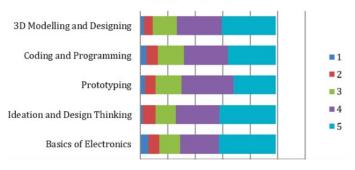
Facilitator's knowledge and ability to convey information during training



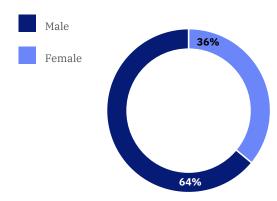
Level of familiarity Post training



Most engaging topics



Gender wise description



Feedbacks of virtual trainings

- Thank you Jagmohan sir, Purnima ma'am and Debashish sir for motivation and improving my knowledge through it was not cup of tea for me to deal with such components but now I am confident that after practice and more learning about the same will become easy - "Anita Yaday, Saint Xavier's School, Mumbai, Maharashtra"
- Thanks to Jagmohan sir, Debashish sir and Purnima madam, to facilitate this opportunity, in future we want to keep in touch, pls be share knowledge. - "Ramesh Rathod LLFI166, Govt. High School, Kalagi, Kalaburgi, Karnataka."
- It was nice learning exerience with the online simulation platform, and I learnt a lot from these sessions. I will definitely try to work on Arduino projects and explain them to students. - "Kaliyaperumal R from Government Higher Secondary School, Panayakkottai."
- The online teacher training session was very much informative and interactive, and the modules that were provided for self-leraniong helped us a lot to understand topics and complete the assessment "Aparisima Samal from Delhi Public School, Damajodi, Odisha."









In 4 years of engagement with AIM/Niti Aayog on the ATL Program, IBM through implementing partners, conducted training across 24 states both on-site and virtual including Andhra, Telangana, Karnataka, Goa, UP, MP, Himachal Pradesh, Haryana, Tamil Nadu, Kerala, Chhattisgarh, Odisha, Maharashtra, Rajasthan, Punjab, Assam, Gujarat, West Bengal, Manipur, Delhi, Jammu & Kashmir, Uttarakhand, Jharkhand, Mizoram and impacted over 7000+teachers, over 1300 schools and 125000+ students. To ensure effective implementation M&E for the program is in the form of video testimonials collected from program participants on their learning from the program and pre-training survey and post-training survey is conducted to understand the degree of improvement among participants and effectiveness of the workshop. In August 2021, the formal closure of the engagement was done with AIM team by IBM CSR.

ATL InnoNet Platform developed by IBM

IBM India in collaboration with NITI Aayog developed the InnoNet platform in order to establish a sustainable support ecosystem for the ATLs and the students. The platform provides a means of connecting the industry mentors (Mentor of Change) with the ATL schools to ensure that the young innovators receive the right mentorship from the leaders in the industry. With thousands of mentors onboarded on InnoNet platform, it is one of the largest volunteer mentor networks in the country. The platform currently enables 5000+ mentors to collaborate with 6000+ schools for mentoring support. The mentor activities are monitored through the portal in terms of number of sessions conducted with the schools and the detailed session reports submitted by mentors.

Key Highlights

Some of the key highlights of the work completed from 2019-22:

- Total 8500+ schools & 5000+ mentors currently registered on the portal
- Overall NPS score of 54.7 with over 790 responses until Mar 2022
- Improved the Mentor experience
 - Platform is now Mobile responsive for easy access to mentor community
 - New portal design and knowledge pages for mentors with relevant information
 - Self-assignment of schools based on availability enabling faster resolutions from NITI
 - · Improved efficiency in managing Mentor community
 - Self- assignment reduced the incoming emails for support. With over 644 reassignments made in first 30 days of the functionality roll-out
 - Organize and conduct campaigns efficiently for mentors through platform. Key Campaign conducted – Regional Mentor of Change & Adobe Creative Educator
 - Enabled tiered support to mentors through regional mentors of change to enable quick support, communication and knowledge sharing amongst mentors in same geography
 - · NITI admin dashboard for better data analysis and reporting
 - Automated onboarding system for the mentors to be registered on a rolling basis

Platform Security

- Updates made on portal in line with NIC recommendations related to vulnerability and penetration testing reports
- Updates made on portal in line with recommendations from NIC Audit team Feature Development Feature Enhancement Platform Maintenance Security Fortification

Feature Development	Feature Enhancement	Platform Maintenance	Security Fortification
 School Reassignment 	 Landing Page 	 Database readiness Moodle 	- SSL
Know your Peer Blogs	User tickets School assignment	upgrade	
 Selective Bulk Emailing 	— User tickers school assignment	 Moodle customisation sync 	 Captcha Backend Version
- RMoC section	process	- UI updates	upgrade
 Data Dashboard 	Report your sessions Forum	Data mining Technical tickets	
Knowledge Hub Mentor	enhancements Mentor	 School onboarding 	 Penetration test resolution
 Onboarding Bulk Mentor 		 Mentor handholding 	 Third party audit resolutions
Assignment	resources	Compliance term update	ima party addit roborditorio
 Mentor Badges 			

The platform was formally handed over to the AIM/ Niti Aayog team on 31st March 2022.

Student Internship

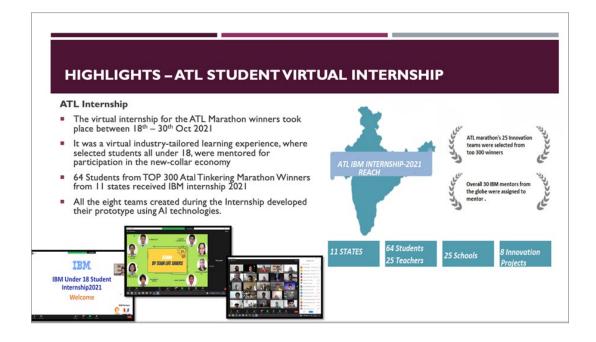
ATL - Atal Tinkering Labs

Keeping pace with the global trend of lending impetus to STEM innovation, Atal Innovation Mission (AIM), a flagship initiative of the NITI Aayog embarked on a ground-breaking journey of sowing seeds of innovation in schools across the country. The journey, characterized by cultivation of scientific temper among students, is also aimed at fostering creativity and nurturing a 'maker' mindset. To this end, 5000 schools have been equipped with Atal Tinkering Labs (ATLs) in different locations to date. Atal Tinkering Labs are state-of-the-art workspaces that spur innovation and gear young minds toward critical thinking and problem-solving with the eventual goal of creating 1 million 'Neoteric Innovators' by 2020.

The 2-week Internship took place from 18th October till 30th October 2022. It was a first-of-its-kind virtual industry-tailored learning experience where selected students, all under 18, were mentored for participation in the new-collar economy. In addition to exposing students to the corporate environment and skilling them to be the workforce of the future, the Internship also provided many opportunities for students to become familiar with new technologies

The year 2021 witnessed the prolonging of the COVID-19 pandemic, with successive highs and lows. However, nothing could dampen the enthusiasm of the students and mentors participating in the annual IBM Internship. The online format that had been introduced in 2020 was also continued this year. More than 60 keen-eyed students, and 25 dedicated educators, from schools across the length and breadth of India, joined the seasoned IBM mentors for virtual sessions over 10 days. The excitement kept on mounting through round after round of deliberation, ideation, brainstorming, prototyping and showcasing of projects.

Working with an overarching theme of "Reimagining the Future", the teams came up with solutions that leveraged the power of cutting-edge technologies to address the visible, or not-so-visible, challenges in their surroundings. Some ideas emerged from the deeply personal experiences of individual students, while others were born out of empathetic identification with the needs of the vulnerable sections of society. A few of the designs reflected the students' urge to create efficient systems that could ease the lives of common citizens. Still others took on the responsibility of envisioning sustainable modes of existence for Planet Earth itself. It proved to be an exhilarating and unforgettable experience for everyone involved. Many of the participants promised each other that they would regroup after school examinations to continue developing their innovative projects.



IBM SkillsBuild for Job Seekers

India has a large demographic dividend, and its workforce is expected to increase to 600 million by 2022, an opportunity to become a global talent hub for emerging technologies. However, per India Skills Report 2021 only 46% of the graduates are job ready. It is hence important that the future workforce is provided with relevant opportunities to reskill and upskill themselves while in the academics to keep up with the demands of the industry. IBM SkillsBuild launched in India with collaboration with Ministry of Skill Development & Entrepreneurship (MSDE) in November 2019 presents a unique opportunity for all the learners across the country to meet their demands of skilling through courses designed to help learners to acquire technical and professional skills required to excel in Industry.

Since it's launch, IBM SkillsBuild for Job Seekers has created a network of strategic government partners like CSC Academy - Ministry of Electronics and Information Technology, skill development missions & technical education departments from Andhra Pradesh, Madhya Pradesh, Punjab, Haryana, Sikkim, Goa, West Bengal, and Telangana including over 1,000 academic institutions across the country. The program has directly impacted more than 1 million learners from 26 states across the country. These learners have cumulatively completed over 1 million courses and 875,000 learning hours and earned 21,000 badges from the platform. The program has also supported over 7,000 students through project-based learning opportunities in emerging technologies like Artificial Intelligence, Full Stack Web Development, Data Analytics etc. while providing over 4,000 hours of mentoring from volunteers from industry. The program has also supported over 26,000 learners with access to employment including 3,500 employment opportunities in green jobs.





IBM SkillsBuild for Students

Per Global Skills Scorecard 2030, a report published by UNICEF, there will be 1.5 billion school-age children in low- and middle-income countries. If current trends continue, well over half of them — 880 million children — will not be on track to acquire the most basic skills they need to succeed in the workforce. India is projected to have the highest number of secondary school graduates amount the south Asian nations — at over 300 million — by 2030 and nearly half of them at 53% will lack skills to enter the workforce. With the quickly changing employment landscape and global ecosystem, it is becoming increasingly critical that children not only learn, but more importantly learn how to learn. IBM SkillsBuild for Students platform with its deep-dive courses on future skills is an apt platform for learners to begin their digital skills journey

IBM SkillsBuild for Students has impacted over 300,000 students & teachers from schools through partnerships with Central Board of Secondary Education (CBSE), corporate foundations and more than 500 schools across 25 states of the country. The learners have completed more than 1.5 million courses on the platform with over 730,000 hours of learning completed on the platform. Over 160,000 students and 10,000 teachers from CBSE schools were activated through the online and offline trainings and were introduced to SkillsBuild. Students were encouraged to submit ideas for solving community challenges using AI as part of the Problem Solvers Tournament and top 100 students were selected for internship opportunity with IBM







Sustainability and Climate Protection

IBM is committed to environmental leadership in all of its business activities, from its operations to the design of its products and the use of its technology.

The IBM Sustainability Accelerator is a pro bono social impact program that applies IBM technologies, such as hybrid cloud and artificial intelligence, and an ecosystem of experts to enhance and scale nonprofit and government organization interventions, helping populations especially vulnerable to environmental threats including climate change, extreme weather, and pollution.

IBM aims to empower Not for profits (NGOs) and Government organizations through IBMers. An initiative designed to encourage IBMers to apply their skills to contribute to the environmental causes they care about.

Sustainability Accelerator Program

IBM is committed to environmental leadership in all of its business activities, from its operations to the design of its products and use of its technology.

The IBM Sustainability Accelerator is a pro bono social impact program that applies IBM technologies, such as hybrid cloud and artificial intelligence, and an ecosystem of experts to enhance and scale non-profit and government organization interventions, helping populations especially vulnerable to environmental threats including climate change, extreme weather, and pollution. Read more about IBM Sustainability Accelerator program and strategy here.

IBM aims to empower Not for profits (NGO) and Government Organization through IBMers. An initiative designed to encourage IBMers to apply their skills to contribute to the environmental causes they care about. In 2021-22, IBM CSR focus was in the area of Agriculture and worked on a project with an NGO in West Bengal.

Clean Food Project with Inhana Organic Research Foundation

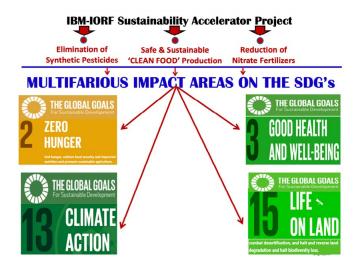
The IBM- IORF Sustainability Accelerator Project is a program for development of a Model for Safe and Sustainable 'Clean Food' Production towards empowerment of Small and Marginal Farmers and preservation of our environment in the back drop of climate change.

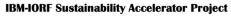
- Clean Food Production- First ever Tangible Demonstration of Safe Product that is also Sustainable; for the Producers, Consumers & the Environment.
- Development of Unique SOIL HEALTH CARD 26 Parameters Study with Soil Biological Assessment, Soil Quality Indices and Report Card for each individual Farm Land considering micro level land fragmentation – a 1st such Approach in Indian Agriculture.
- SWOT Study & Development of Village Level SOIL RESOURCE MAPS (Total 96 Maps) of the entire Project Influence Area – Unique w.r.t. Indian Agriculture.
- Standardization of Colorimetric Pesticide Assay Test a Scientific yet an Economical Process that can enable Batch wise End Product Safety Assessment – especially relevant for the small and marginal vegetable growers.

The Project is a 360 Degree Convergence Program encompassing Multifarious Activities

- Soil health assessment up to micro grid of 0.16 hec.
- SWOT study of the project area.
- On- farm compost production using novcom composting method.
- Soil health management under irf technology.
- Plant health management under irf technology.
- On-farm production of concoctions for soil & plant energization.
- Batch wise colorimetric pesticide assay test for safety authentication of "clean food".











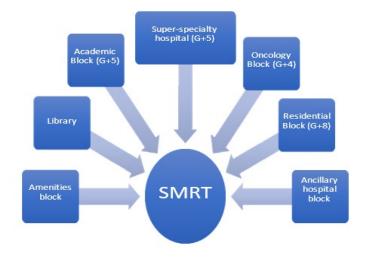
Technology Research & Health Care

School of Medical Research and Technology IIT Kanpur

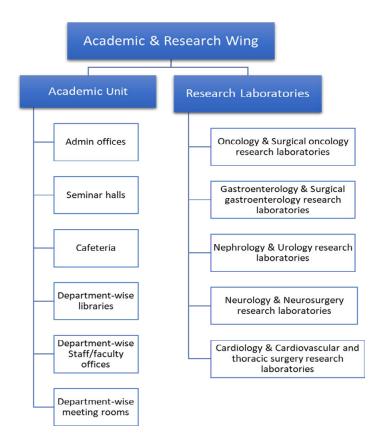


IIT Kanpur proposes to establish the School of Medical Research and Technology (SMRT) which will converge its technology and innovation competencies with medical sciences to catapult the Institute into the league of global institutions that are driving advancements in human biology and health through technology interventions. This will be achieved through 'Centers of Excellence (CoE)' on futuristic medicine as part of SMRT and a Super- Specialty Hospital as an extension of these CoE.

The hospital component of the SMRT would be operated as a Section 8 Company (Non-profit organization) named 'Foundation of Medical Research and Technology' already set up under the Indian Companies Act, 2013. This will ensure the super-specialty hospital is run as a world-class medical facility with long-term financial sustainability.



SMRT INFRASTRUCTURE -Academic Block funded by IBM



Infrastructure - progress

The SMRT project will be completed in two phases. The SMRT complex will be built over a 30-acre plot within the IIT Kanpur campus. The space has been identified and various preconstruction studies are being carried out. The proposed architectural design and preliminary estimates for SMRT were presented to Building & Works Committee and also to the Board of Governors. The concept design is built on the philosophy of fire safety, well-lit, a window for every patient, manageable isolation facilities and better ventilated. Hosmac is working on the detailed structural drawings for tendering process, which will be under EPC3 mode. Detailed drawings for MOEF clearance are under process. Meanwhile, we are working to integrate robotics and hospital management information system in the healthcare set up.

- The architectural design for super-specialty hospital, Oncology block, academic block and residential block are finalized.
- The structural design plans for the Academic block and Residential block were presented to the Building and Works Committee Board.
- A detailed design will be processed for EPC3 mode tendering.
- Simultaneously, MOEF approval processes are also being carried out.
- Recently, our architecture and planning consultant, Hosmac India Pvt. Ltd., team visited the SMRT site and discussed various aspects of designing in length with IITK team.
- Timelines and deliverables are worked out for the timely completion of the construction.

Disaster Mitigation & Pandemic Response

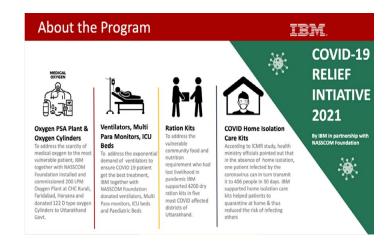
India has witnessed its worst nightmare in the form of health catastrophe due to sudden outbreak of COVID-19 second wave. The number of daily cases started increasing exponentially and each day it was setting new records.

The Country's health infrastructure crippled under the burden of high demand of oxygen supply, ICU beds, Monitors, Ventilators in several cities and rural areas as they fight to save patients.

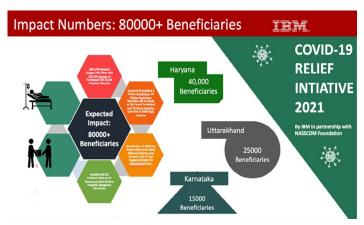
IBM partnered with NASSCOM Foundation to extend its support to Karnataka, Uttarakhand and Haryana CHC and Civil hospitals to fulfil their various emergency need such as medical oxygen cylinders, multi para monitors, ventilators, etc.

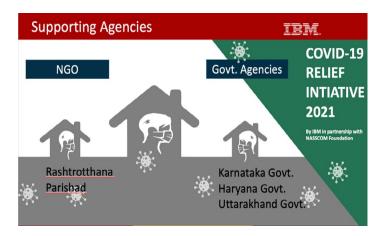
In addition to that IBM sponsored 4200 dry ration kits to the economically weaker section families who had lost their livelihood due to pandemic.

This immediate health infra support from IBM helps the COVID warriors and stranded patients in their fight against the COVID 19

































Dr <u>Shesha</u> Prasad -RMDS, PHD Sri Krishna <u>Sevashrama</u> Hospital, Bengaluru -Karnataka



Beneficiaries Speak on receiving dry ration food kits during pandemic UttraKhand



COVID-19

By IBM in partnership with NASSCOM Foundation



CORPORATE SOCIAL RESPONSIBILITY (CSR)

FORMAT FOR THE ANNUAL REPORT ON CSR ACTIVITIES TO BE INCLUDED IN THE BOARD'S REPORT FOR FINANCIAL YEAR COMMENCING ON OR AFTER 1ST DAY OF APRIL, 2021

1. Brief outline on CSR Policy of the Company.

IBM believes that a company culture based on core values not only helps our business, but also defines the role that we can and should play in society;

We identify and act upon new opportunities to apply our technology and expertise to societal problems.

We scale our existing programs and initiatives to achieve maximum benefit.

We empower our employees and others to serve their communities.

We integrate corporate citizenship and social responsibility into every aspect of our company.

2. Composition of CSR Committee:

Sl. No.	Name of Director	Designation /Nature of Directorship	Number of meetings of CSR Committee held during the year	Number of meetings of CSR Committee attended during the year
1	Mr. Amit Sharma-	Chairman	1	1
2	Mr. Sandip Patel	Member	1	1
3	Mr. Thirukkumaran Nagarajan	Member	1	0
4	Ms. Tejaswini S. Rajwade	Member	1	1



3. Provide the web-link where Composition of CSR committee, CSR Policy and CSR projects

approved by the board are disclosed on the website of the company https://www.ibm.com/in-en/impact/responsibility

4. Provide the details of Impact assessment of CSR projects carried out in pursuance of sub-rule (3) of rule 8 of the Companies (Corporate Social responsibility Policy) Rules, 2014, if applicable (attach the report).

(Following 3 impact assessment reports are appended as annexures to this report)

- i) New Collar Employability skills program
- ii) Atal Tinkering Labs program
- iii) Covid-19 relief programs
- 5. Details of the amount available for set off in pursuance of sub-rule (3) of rule 7 of the Companies (Corporate Social responsibility Policy) Rules, 2014 and amount required for set off for the financial year, if any

Sl. No.	Financial Year	Amount available for set-off from preceding financial years (in Rs)	Amount required to be setoff for the financial year, if any (in Rs)
1	2020-2021	47,00,728	47,00,728
	Total	47,00,728	47,00,728

- 6. Average net profit of the company as per section 135(5). INR 32,296,087,070
- 7. (a) Two percent of average net profit of the company as per section 135(5)-

INR 645,921,741

- (b) Surplus arising out of the CSR projects or programmes or activities of the previous financial years. INR47,00,728
- (c) Amount required to be set off for the financial year, if any INR 47,00,728
- (d) Total CSR obligation for the financial year (7a+7b-7c)- IN 645,921,741



8. (a) CSR amount spent or unspent for the financial year:

Total Amount	Amount Unspent	(in Rs.)			
Spent for the	Total Amount trai	nsferred to	Amount transferred to any fun	d specified under	
Financial Year.	Unspent CSR Acc	ount as per	Schedule VII as per second pr	oviso to section 135(5	5).
(in Rs.)	section 135(6).				
	Amount	Date of Transfer	Name of the fund	Amount	Date of transfer
641,221,013	47,095,970	Apr 30th 2022	NA	NA	NA

b) Details of CSR amount spent against <u>ongoing projects</u> for the financial year:

SL .N o.	Na me of th e Pr oje ct	Item from the List of activiti es in Sched ule VII of the Act.	Lo ca l ar e a(Y es / N o)	Location of the project State	D i s t r i c t	P r o j e c t D u r a t i o n	Amount allocated for the project (in Rs)	Amount Spent in the current financial year (in Rs.)	Amount transferred to unspent CSR account for the project as per Sec. 135(6) (in Rs.)	Mo de of Im ple me nta tio n Dir ect (Ye s/ No)	Mode of implo through imp agen Name	CSR Registra tion No.
1	ST EM for Gir Ls	<u>on</u>	Yes	Andaman and Nicobar Islands, Andhra Pradesh,Arunachal Pradesh,Assam,Bihar,Chandi garh,Chhattisgarh,Dadra and Nagar Haveli,Daman & Diu,Delhi,Goa,Gujarat,Harya na,Himachal Pradesh, Jammu and Kashmir,Jharkhand,Karnatak a,Kerala,Ladakh,Madhya Pradesh,Maharashtra,Manip ur,Meghalaya,Mizoram,Nagal and,Odisha,Puducherry,Punj ab,Rajasthan,Sikkim,Telanga na,Tripura,Uttar Pradesh,Uttarakhand,West Bengal,			10817945	10817945	4515446	NO	The American India Foundation Trust The American India Foundation Trust- Vigyan Jyoti	CSR000 01977 CSR000 01977
				Karnataka, Andhra Pradesh, Telangana, Odisha, Assam, Bihar, Gujarat, Haryana, and Nagaland			191730486	184428642			Quest Alliance	CSR000 01110
				Delhi NCR,Karnataka,West Bengal, Madhya Pradesh,Telangana,Maharas htra,Himachal Pradesh,Uttarakhand,Goa			7876260	7876260	3235806		Learning Links Foundation	CSR000 00640

SL. No.	Nam e of the Proje ct	Ite m fro m the List of acti viti es in Sch edu le VII of the Act	L o c al ar e a(Y e s/ N o)	Location of the project State	D i s t r i c t	P r o j e c t D u r a t i o n	Amount allocated for the project (in Rs)	Amount Spent in the current financial year (in Rs.)	Amount transferr ed to unspent CSR account for the project as per Sec. 135(6) (in Rs.)	Mo de of Im ple me nta tio n Dir ect (Ye s/N o)	implem thro	le of entation ough ting agency CSR Registrat ion No.
	STEM for Girls	Edu cati on	Y e s				9005000	9004995			KPMG- Program assessm ent fund	
2	AI for all / IBM AI Curric ulum	Edu cati on	Y e s	Andhra Pradesh,Arunachal Pradesh,Assam,Chhatisgarh,Dadra and Nagar Haveli,Delhi,Gujarat,Haryana,Himacha l Pardesh,Jammu and Kashmir,Jharkhand,Karnataka,Kerala, Madhya Pradesh,Maharashtra,Manipur,Odhish a,Punjab,Rajasthan,Tamil Nadu,Telangana,Uttar Pradesh,Uttarakhand,West Bengal,			22500000	22500000		No	1M1B Foundati on	CSR0000 6598
				Delhi, Maharashtra,Rajasthan,Karnataka, Tamil Nadu,Uttar pradesh,Uttarakhand,Haryana,Madhy a Pradesh, Telangana ,Gujrat, Punjab,			8999000	8999000	5077068		Learning Links Foundati on	CSR0000 0640
				Andhra Pradesh,Arunachal Pradesh,Assam,Chhatisgarh,Dadra and Nagar Haveli,Delhi,Gujarat,Haryana,Himacha l Pradesh, Jammu and Kashmir,Jharkhand,Karnataka,Kerala, Madhya Pradesh,Maharashtra,Manipur,Odhish a,Punjab,Rajasthan,Tamil Nadu,Telangana,Uttar Pradesh,Uttarakhand,West Bengal,			22480000	6744000			1M1B Foundati on- Global Teachers Academy for AI-	CSR0000 6598
3	ATL - Innon et plat form	Edu cati on	y e s	Telangana, Maharashtra, Haryana, Delhi, Karnataka and Gujarat			5625000	5625000		No	Edunet Foundati on (Innonet Platform Costs)	CSR0000 1388

elbu

SL. No.	Name of the Proje ct	Item from the List of activ ities in Sche dule VII of the Act.	Local area(Y es/No)	Location of the project State	D i s t r i c t	P ro je ct D ur at io n	Amount allocated for the project (in Rs)	Amount Spent in the current financial year (in Rs.)	Amoun t transfe rred to unspen t CSR accoun t for the project as per Sec. 135(6) (in Rs.)	Mo de of Im ple me nta tio n Dir ect (Ye s/N o)	Mode of imp through imp age Name	olementing ncy CSR Registratio n No.
4	Advan ce Diplo ma in IT-	Educ ation	yes	Gujarat,Haryana,Karnata ka,Kerala,Kerala,Madhya Pradesh,Maharashtra,Odi sha,Tamil Nadu,Telangana,Uttarak			41850000 3150000	41850000 3150000		No	Edunet Foundation (ITI) Edunet Foundation	CSR00001 388 CSR00001 388
	Netw orking &			hand,Uttar Pradesh,West Bengal,							(ITI) - Industry out reach	
	Cloud Comp uting			Gujarat,Haryana,Karnata ka,Kerala,Kerala,Madhya Pradesh,Maharashtra,Odi sha,Tamil Nadu,Telangana,Uttarak hand,Uttar Pradesh,West Bengal,			2220000	2220000			Edunet Foundation - Internship additional budget	CSR00001 388
				Odisha			11250000	11250000			Edunet foundation N_E and Odissa Expansion	CSR00001 388
5	Skills Build for Jobse eker	Educ ation	Yes	Andhra Pradesh,Bihar,Gujarat,Ha ryana,Jharkhand,Karnata ka,Kerela,Madhya Pradesh,Maharashtra,Ne w Delhi,Odisha,Puducherry, Punjab,Rajasthan,Tamil Nadu,Telangana,Uttar Pradesh,Uttarakhand,We st Bengal,			42750000	42750000		NO	Edunet Foundation	CSR00001 388



SL .N o.	Name of the Proje ct	Item from the List of activit ies in Sched ule VII of the Act.	L o c a l a r e a (Y e s / N o)	Location of the project State	Dis tric t	Pro ject Dur ati on	Amount allocated for the project (in Rs)	Amount Spent in the current financial year (in Rs.)	Amou nt transf erred to unspe nt CSR accou nt for the projec t as per Sec. 135(6) (in Rs.)	M o d e of I m pl e m e nt at io n Di re ct (Y es / N o)	Mode of imple through imple agend Name	ementing
	Skills Build for Jobse eker	Educa tion	Y e s	Andhra Pradesh,Assam,Delhi,Goa,Gujarat ,Haryana,Himachal Pradesh,Jharkhand,Karnataka,Ker ala,Madhya Pradesh, Maharashtra ,Meghalaya.,Nagaland,Odisha,Pu njab,Rajasthan,Tamilnadu,Telang ana,Uttar Pradesh, Uttarakhand,			8997037	8997037			Shri Mahakal Education and Charitable Trust Rajkot	CSR00004 675
				Maharashtra, Madhya Pradesh, Uttar Pradesh, Goa, Bihar, Delhi, Chattisgarh, Jharkhand			2250000	2250000			Reacha Foundation	CSR00000 086
				Uttarakhand			7200000	7200000			Uva Jagriti Sansthan	CSR00003 514
6	Skills Build for Stude nts	Educa tion	Y e s	Andhra Pradesh,Assam,Bihar,Delhi,Goa,H aryana,Himachal Pradesh,Karnataka,Kerela,Mahar ashtra,Manipur,Puducherry,Punj ab,Rajasthan,Tamil Nadu,Telangana,Uttar Pradesh, Uttarakhand,			17154000	17154000		N 0	Edunet Foundation	CSR00001 388
				Andhra Andhra Pradesh,Bihar,Chattisgarh,Delhi, Gujarat,Haryana,Laddakh,Karnat aka,Madhya Pradesh, Maharashtra ,Odisha,Punjab,Rajasthan,Tamiln adu,Telangana,Uttar Pradesh,			6743492	6743492			Shri Mahakal Education and Charitable Trust Rajkot	CSR00004 675



SL. No	Name of the Projec t	Item from the List of activiti es in Schedu le VII of the Act.	Loc al are a(Y es/ No)	Location of the proje State	Dis tric t	Proj ect Dura tion	Amount allocated for the project (in Rs)	Amount Spent in the current financial year (in Rs.)	Amount transferre d to unspent CSR account for the project as per Sec. 135(6) (in Rs.)	Mo de of Im pl e m en tat io n Dir ec t (Y es /N o)	Mode impleme throu impleme agen Name	ntation gh enting
	SkillsB uild for Stude nts	Educati on	Yes	Andhra Pradesh,Arunachal Pradesh,Assam,Chattisgar h,Delhi,Gujarat,Haryana, Himachal pardesh,Jammu & Kashmir,Karnataka,Kerala ,Madhya Pradesh,Maharashtra,Ma nipur,Odisha,Punjab,Raja sthan,Sikkim,Tamil Nadu,Telangana,Uttar Pradesh,Uttarakhand,We st Bengal, ANDHRA PRADESH ,ASSAM,BIHAR,CHHATTIS GARH,DELHI,GOA,GUJAR AT,HARYANA,HIMACHAL PRADESH,KARNATAKA,KE RALA,MADHYA			13499995 3371500	5493526 3371500			1M1B Foundati on Learning Links Foundati on (LLF)	CSR00 006598 CSR00 000640
7	Sustai			PRADESH,MAHARASHTRA ,NAGALAND,ODISHA,PUN JAB,RAJASTHAN,SIKKIM,T AMIL NADU,TELANGANA,UTTA R PRADESH,UTTARAKHAND, West Bengal			5175000	5175000		No	Inhana	CSR00 013345
	nabilit y and accele rator						2255000	2255000	2,263,395		Organic Research Foundati on TNC nature	CSR00 001862
				UP and Delhi			9900000	9900000			Edunet Foundati on- Green jobs(Phas e 1 and 2)	CSR00 001388

Bangalord

SL.	Name	Item	L	Location o	of	Р	Amount	Amount	Amount	Мо	Mode of implement	tation
No.	of the	from	0	the project	ct	ro	allocated for	Spent in the	transferred to	de	through implemen	nting
	Projec	the	С			je	the project (in	current	unspent CSR	of	agency	
	t	List of	a	State	D	ct	Rs)	financial	account for the	Im	Name	CSR
		activi	ι		i	D		year (in Rs.)	project as per	ple		Regi
		ties in	a		s	ur			Sec. 135(6) (in	me		strat
		Sched	r		t	at			Rs.)	nta		ion
		ule	е		r	io				tio		No.
		VII of	a		i	n				n		
		the	(С					Dir		
		Act.	Υ		t					ect		
			е							(Ye		
			S							s/N		
			/							0)		
			N									
			0									
8	Health	Healt	,	Kanpur	-		135000000	9000000	31750000	NO	INDIAN INSTITUTE	
°	пеаш	h	Υ	Kanpui			13300000	9000000	31730000	INO	OF TECHNOLOGY	
			e								KANPUR- Super	
			s								specialty hospital	
			3	Totals	_						specially nospital	-
				. 5.015				577,081,952				
								377,031,732				

(c) Details of CSR amount spent against other than ongoing projects for the financial year

SL.	Nam	Item	Local	Location of the pro	ject	Pr	Amount	Amount	Amou	Mode	Mod	de of
No.	e of	from	area(Ye			oj	allocated	Spent in	nt	of	implem	entation
	the	the	s/No)			ec	for the	the	transf	Imple	through im	plementing
	Proj	List				t	project (in	current	erred	menta	age	ency
	ect	of		State	Dist	D	Rs)	financial	to	tion	Name	CSR
1		activi			rict	ur		year (in	unspe	Direct		Registrati
		ties				at		Rs.)	nt	(Yes/N		on No.
		in				io			CSR	0)	1	
		Sche				n			accou			
		dule							nt for			
		VII of							the			7
		the							projec			
		Act.							t as			
									per			
									Sec.			
									135(6			
) (in			
									Rs.)			
1	Disa		Yes	Bangalore,			32400000	32400000		No	NASSCO	CSR00000
1	ster			Uttarakhand,							М	689
				Faridabad							Foundatio	
				randabad							n	
						-		32400000				
												10.
				Totals								ate

(d). Amount spent in Administrative Overheads- INR - 29,022,112

(e) Amount spent on Impact Assessment, if applicable – INR 2,716,949

(f)Total amount spent for the Financial Year(8b+8c+8d+8e)- INR 641,221,013

Excess amount for set of if any;

SL.No	Particulars	Amount (in Rs.)
(i)	Two percent of average net profit of the company as per section 135(5)	645,921,741
(ii)	Total amount spent for the Financial Year	645,921,741
(iii)	Excess amount spent for the financial year [(ii)-(i)]	0
(iv)	Surplus arising out of the CSR projects or programmes or activities of the previous financial years, if any	0
(v)	Amount available for set off in succeeding financial years [(iii)-(iv)]	0

9. (a) Details of Unspent CSR amount for the preceding three financial years:

SL.No.	Preceding	Amount	Amount	Amount tra	ansferred to any	fund	Amount
	Fin. Year	transferred to	spent	specified			remaining to
		Unspent CSR	in the	under Scho	edule VII as per	section	be spent in
		Account under	reporting	135(6), if		succeeding	
		section 135 (6)	Financial	any.		financial	
		(in Rs.)	Year	Name of	Amount In	Date of	years. (in
			(in Rs.).	the Fund	(Rs).	transfer	Rs.)
1	NA						

(b) Details of CSR amount spent in the financial year for ongoing projects of the preceding financial year(s):

(1	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
SL	Pr oje ct ID	Name of the Project	Financial Year in which the project was commenced	Project duratio n.	Total amount Allocated for the project (in Rs	spent on the project in the reporting Financial Year (inRs).	Cumulative amount spent at the end of reporting Financial Year. (in Rs.)	Status of the project - Complet ed /Ongoing
1		STEM for Girls	2020-2021	4yrs	273,454,397	273,454,397	582,486,961	ongoing
2		AI for all / IBM AI Curriculum	2020-2021	4yrs	38,243,000	38,243,000	99,648,658	ongoing
3		ATL - Innonet plat form	2020-2021	2yrs	5,625,000	5,625,000	27,382,782	ongoing

4	Advance Diploma in IT-Networking & Cloud Computing	2020-2021	4yrs	58,470,000	58,470,000	104,813,046	ongoing
5	SkillsBuild for Jobseeker	2020-2021	4yrs	61,197,037	61,197,037	98,230,437	ongoing
6	SkillsBuild for Students	2020-2021	4yrs	32,762,518	32,762,518	65,480,630	ongoing
7	Sustainability and accelerator	2021-2022	4yrs	17,330,000	17,330,000	17,330,000	ongoing
8	Health	2020-2021	4yrs	90,000,000	90,000,000	101,732,805	ongoing

10. In case of creation or acquisition of capital asset, furnish the details relating to the asset so created or acquired through CSR spent in the financial year (asset-wise details).

SL.No	(a). Description of the Asset	(b) Date of creation /acquisition of Capital asset	(c) Details of the entity or public authority or beneficiary under whose name such capital asset is registered, their address etc	(d)) Provide details of the capital asset(s) created or acquired (including complete address and location of the capital asset).
1.	NA			
2.	NA			

11. Specify the reason(s), if the company has failed to spend two per cent of the average net profit as per section 135(5).

Not Applicable since the Company has spent more than the mandated requirement.

Amit Sharma

Chairman of CSR Committee

DIN: 00404377

Sandip Patel

Managing Director

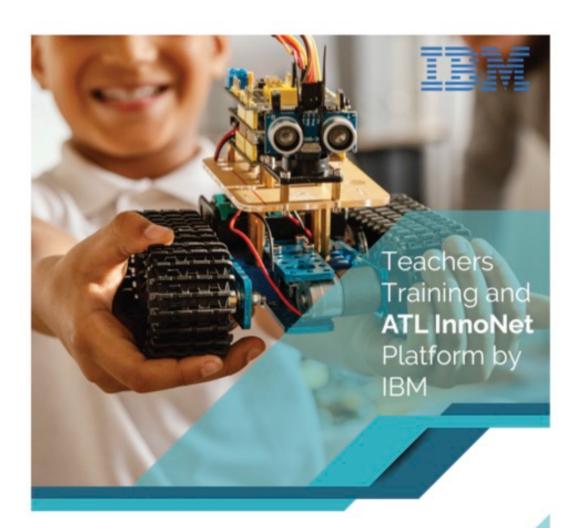
DIN: 08810865

ANNEXURE -III

Impact assessment reports

- 1. ATL Program report
- 2. New Collar Employability Program report
- 3. Covid relief program report





Impact Assessment Study



Prof. Jyoti Kumar
Department of Design
Indian Institute of Technology
New Delhi-110016

Acknowledgments

We take this opportunity to thank the entire IBM team who implemented this project. Especially our sincere thanks to Mr. Manoj Balachandran, Head, CSR IBM, India & South Asia, under whose leadership this project has been implemented. Also, our thanks are due to Miss. Shobha Mani, Program Manager for this CSR initiative, who reached out to us and provided all the support during the conduct of this assessment study. We would also like to thank Miss Amani Sandupatla, from the Learning Links Foundation who helped us in connecting with the ATL instructors and trainers. Also, our thanks to all the participants of our study, the ATL instructors, principles of schools, students, mentors of change and the trainers.

Our thanks to the IITD team consisting of Dr. Greeshma Sharma, Ms. Priyanka Besalla, Mr. Pawan Pagaria, Ms. Mananpreet Kaur, Mr. Vivek Ranjan, Ms. Christy Gogu, Mr. Abhijeet Kujur, Ms. Saumya Srivastava and Ms. Ira Bhattacharya. They worked hard in a short timeline to conduct the detailed field research, online interviews, survey design, analysis, graphics design activities and report preparation.

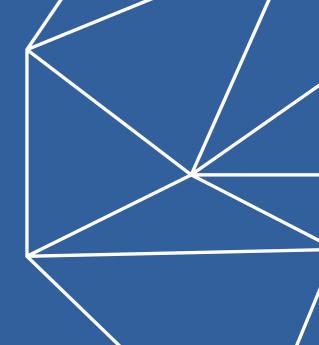
Executive Summary

This is an assessment report of initiatives taken by IBM in the Atal Tinkering Lab (ATL) ecosystem, namely, to provide training to ATL incharges, build the InnoNet portal, and provide internships to school students. This report has found that all three initiatives have positively affected the mission of ATL labs. This assessment study has followed the methodology of collecting first-hand data from teachers, trainers, students, and mentors using deep qualitative interviews. Also, the data from surveys and lab visits were triangulated with the findings of the interviews. It was found that the training of school level ATL incharges was done successfully in a professional manner. This Training had a positive impact on the ATL incharges. The ATL incharges felt more confident and motivated in their tasks of mentoring the students at the school labs. The tinkering kits that were used at the instruction sessions encouraged mutual learning among ATL incharges, and that in turn added confidence to the ATL incharges to take up such tasks with students as well. Further, the 'mentors of change' have reported that they found InnoNet to be a useful tool to understand the pedagogy, the goals, and provide opportunities for mentors to have discussions with other mentors. The portal also helped them coordinate with other mentors and report their activities. The IBM internship was offered to a select few. Those who got it have reported it to be immensely helpful to their innovation plans. The students who interned at IBM and later had startups reported that the exposure they got from IBM resources boosted their confidence and provided a much-needed network for their innovation plans. Overall, this study has found that the three initiatives taken by IBM were of great help towards fulfillment of the objectives of ATL mission and need to be scaled up.

Based on the findings of this study, it is recommended that follow-up sessions be conducted with ATL incharges, especially in light of the gap in practice during the pandemic. This report argues that the ATL incharges are the most important node in the ATL ecosystem, therefore strengthening their confidence and capacity will go a long way towards ensuring the success of the ATL program. A vibrant culture of innovation and tinkering at the school level will require the incharges and the mentors to sync together. Therefore, the onboarding of the incharges on the InnoNet could be one mechanism to facilitate this goal. Mentors of change, school admin, and ATL incharges can be facilitated to network and reinforce each other towards this goal of developing a culture of tinkering at the school level. Similarly, carrying forward innovative ideas through business lenses will be required to help succeed the initial germinations at school levels, and internships will continue to play a role in this regard.

2021 - 22





Impact Assessment of IBM New Collar Employability Skills Program

Presented by -Sattva Media & Consulting Pvt Ltd

Declaration

This study report on the 'Impact Assessment of IBM New Collar Employability Skills Program' is undertaken by Sattva Consulting Pvt. Ltd. The study was conducted in regions of Faridabad and Karnataka.

The Sattva team extends its gratitude to all the primary and secondary stakeholders, who shared their experiences, thoughts, suggestions, and valuable time during the execution of the study.

The Sattva team would like to extend our sincere thanks to IBM and all its functionaries who extended their wholehearted cooperation in accomplishing the study at different levels. Our team is immensely grateful to Ms. Shobha V. Mani for offering valuable suggestions and input. We are immensely thankful for the guidance, precious support, and valuable suggestions and inputs during each step of the way. We would also like to extend our sincere regards to the Implementation Partners of the IBM program who have supported our study throughout. Ms. Ashima Mathur from NASSCOM Foundation, Mr. Imran Shaikh and Mr. Anand Kumar from TMIe2e, Mr. Jijo Abraham, and Mr. Prateek Tikoo from iPrimed for their priceless cooperatio

Executive Summary

Brief on the IBM New Collar Employability Skills program

IBM commenced the New Collar Employability Skill Program in the year 2018 in partnership with the NASSCOM Foundation to implement a technical skills development program for undergraduate students from underserved communities. Based on the growing need for more nuanced skill development programs pertaining to future skills to address the issue of unemployment in India, IBM developed its program around imparting technical and soft-skills training to students from Tier II and Tier III colleges. The objective of the program was to make the students job-ready and thereby empower them to compete in high-paying jobs across industries.

The content of the program was designed by the IBM team. The program was implemented by the training partners TMIe2E and iPrimed Education solution at the partner colleges as per the agreed schedule. The program culminated in the year 2020.

Impact Assessment Study

This report by Sattva Consulting Pvt. Ltd. presents the results of the impact assessment study conducted for IBM's New Collar Employability Skill Program in Faridabad and Karnataka. The impact assessment study was carried out from November 2021 to March 2022. The Sattva team interacted with various stakeholders to get a 360-degree perspective on the project. Quantitative surveys were conducted across two locations covering a total of 186 respondents in addition to the qualitative interviews and group discussions.

Observations, insights, and recommendations were mapped at three levels:

- Alignment of the need of the target group and project objectives to maximise impact
- Rigour of on-ground implementation to bring the intended result on time, and risk mitigation strategies
- To assess the positive impact on the beneficiaries' knowledge and level of awareness regarding technical job opportunities

Key Insights from the Study

Program Level



Program activities are aligned with the needs of the beneficiaries from Tier II and Tier III colleges who lacked access to a technical skill development program prior to the intervention.

The program curriculum addressed key areas of technical and soft skills but needs to be contextualised to take into account the varying needs and challenges of students.

Faridabad Location

- Almost 70% of the beneficiaries are confident in leading projects and presenting their ideas in college or at the workplace, and 68% are comfortable communicating in the English language
- 82% of the beneficiaries reported an increase in the Information Technology, and BPO sector job opportunities for the program beneficiaries post-training
- 3 100% of the beneficiaries were mobilised in college but a lack of selection process to understand the needs and expectations of the beneficiaries is creating misalignment between their aspirations and program offerings.
- Beneficiaries' perceived level of understanding is highest in Data Science as compared to Cloud Computing, and students from a Commerce background struggled to grasp the course content.
- The online teaching model was adopted for smooth program delivery. However, network issues affected 78% of the beneficiaries in accessing online classes.
- About 30% of the beneficiaries did not receive feedback on skill assessments from the classroom trainers due to the limitations of the online training model
- 72% of the beneficiaries opted for opportunities in higher education as opposed to job employment upon course completion.

Karnataka Location

- Over 86% of the beneficiaries are confident in leading projects and presenting their ideas in college or at the workplace, and 71% are comfortable communicating in the English language.
- 50% of the beneficiaries reported an increase in the job opportunities for the program beneficiaries post-training in the Information Technology and BPO sector.
- The program mobilised 56% of women from Tier II and III colleges across Karnataka, exceeding the target of 50% women participation.
- 85% of the beneficiaries were mobilised in college, for two-thirds of the beneficiaries the program was made mandatory, leading to misalignment between their area of interest and the program offers.

- Program activities are aligned with the needs of the beneficiaries from Tier II and Tier III colleges who lacked access to a skill development program before the intervention.
- Although the program was designed to place the beneficiaries in the course relevant jobs, there is scope to improve the alignment between beneficiary aspirations and available job opportunities.
- Beneficiaries' perceived level of understanding is highest in Data Science because of their background in Mathematics and Statistics. Also, the course is relevant and booming due to digitization.
- The online training model was adopted for smooth program delivery. However, network issues affected 72% of the beneficiaries in accessing online classes.
- About 33% of the beneficiaries did not receive feedback on their skill assessment from the classroom trainers due to the limitations of the online training model.

Key Recommendations



Strengthening the beneficiary mobilisation and selection process

- Creating a standardised two-day in-campus campaign consisting of orientation, and demonstration classes that describe the program structure and requirements in-depth.
- Conducting a psychometric aptitude test and counselling sessions to assess the candidate's interests, attitude, and personality to understand their current capabilities and assign coursework to strengthen the core competencies



Involving the classroom trainers in the curriculum design process to further contextualise the program coursework

 Incorporating the trainer's thoughts and feedback into the curriculum during the design phase would further refine and contextualise content based on the beneficiaries' current level of understanding and challenges faced.



Creating a standardised feedback mechanism between the trainers and IBM to communicate on-ground challenges and plan solutions

• Quarterly virtual meeting on Zoom with the IBM program team and classroom trainers to understand the on-ground progress, curriculum specific challenges and overall implementation.



Providing post-placement support to the beneficiaries to ensure higher employment retention

• Providing post-placement support to the beneficiaries to help them resolve problems they may encounter while on the job and help them navigate through the professional and personal challenges.



Developing a network of current and alumni program beneficiaries for knowledge sharing and peer-to-peer mentoring

- Build an online alumni network or association for all the program beneficiaries on Facebook or Linkedin, managed by IBM
- Such a platform can be used for exchanging information regarding job availability and sharing best practices and potential challenges in the workspace.

2021-22 **Executive Summary** of Covid-19 and **Amphan Relief Program**

IBM commissioned Sattva to undertake an impact evaluation study of its COVID-19 and Amphan Relief Programmes which aim to enable immediate relief after a disaster, by providing them with food and basic necessities supplies to deal with the uncertainties among the marginalised communities.

Through the COVID-19 and Amphan relief programs in 6 different regions in India, the IBM CSR initiative contributes towards disaster relief by providing food and basic necessities. The program's engagement enables the community to pave the way towards immediate relief from hunger, basic hygiene as well as shelter and clean drinking water opportunities for sustainability. The COVID-19 and Amphan relief programs work in consultation and close collaboration with initiatives of the NGOs and local partners on the ground to ensure meeting the short outcomes of the program.

Need for the program in the context of Covid-19 and Amphan Relief

The outbreak of the COVID-19 pandemic and the subsequent national, and local lockdowns worsened the state of unemployment and exacerbated food insecurity among the target communities. The evaluation shows that disruption/lack of income, and food insecurity were the two largest challenges faced by the beneficiaries during the COVID-19 pandemic and the subsequent lockdowns.

6.5% beneficiaries stated having no source of income pre-pandemic, a figure, which rose to 28% post the outbreak of the COVID-19 pandemic

77.12% of the beneficiaries faced acute food shortage due to the COVID-19 induced lockdowns

In the aftermath of Cyclone Amphan, beneficiaries experienced a disruption in the supply of clean drinking water, partial, and in some cases, complete destruction of homes, a disruption in the source of household income, and an acute shortage of food and hygiene essentials.

More than 50% of the beneficiaries had to relocate and make alternative arrangements for accommodation.

The shortage of food translated into a reduction in the portions of meals, a reduction in the number of daily meals, and loss of harvest, and/or livestock. The top three areas of support required by the beneficiaries as expressed in the survey were: (i) Food and essentials relief, (ii) Access to safe, clean drinking water, and (iii) Assistance in reparation of damaged homes

Implementation of the program

Covid-19 Relief

IBM's partners, United Way Mumbai, and NASSCOM Foundation have large networks of local NGO partners who have strong outreach, and community presence.

NASSCOM Foundation partnered with SEWA International, Ladli Foundation, Navjyoti Foundation, and Delhi Police in Delhi NCR to distribute ration kits, and care kits. These organisations also conducted community sensitization with regards to best practices to avoid, and cope with COVID-19 infections for the beneficiaries.

United Way Mumbai partnered with vendors and local NGO partners - AID India, Chennai, Child In Need Institute, Kolkata, Nirman Bahuudeshiya Vikas Sanstha, Pune, Nirmaan Organization, Hyderabad for pre-mixed meals and Samarthanam Trust, Bangalore, Swabhimaan, Bangalore. Protsahan India Foundation, Delhi for Cooked meals with whom they share a pre-existing relationship in order to roll out the program at the earliest.

Cooked Meals were distributed in Mumbai, Bengaluru, and Delhi, while Pre-Mixed Meals were distributed in Chennai, Kolkata, Hyderabad, and Pune.

Amphan Relief

SEEDS India sought to alleviate the distress of Cyclone Amphan affected communities in West Bengal by distributing ration kits, hygiene kits, repairing and building transitional shelters, providing medical aid and safe drinking water.

The program was centred in the Gopal Nagar Gram Panchayat of Patharpratima, in the South 24 Parganas district of West Bengal.

IBM's COVID-19 Relief Efforts

The COVID-19 Relief Response during the first wave of the pandemic was implemented in 10+ locations across the country. With the support of Big Basket, four NGOs, and six government bodies from different states, over 3,43,000 people were impacted across five regions in India.

39,080 Food & Care Kits were procured and over 39,000 households were provided with Food supplies and Care Kits, that catered to more than 1,56,000 individuals. The community sensitization campaign focused on the importance of social distancing and maintaining personal hygiene, and reached out to more than 47,000 individuals.

	Beneficiary	Total Beneficiaries Reached	Description of the Relief- Aid
Cooked Meals	Individuals from street communities, daily wage workers, migrant labourers, etc.	20550	Cooked Meals
Pre-mixed Meals	Families of daily wage earners, factory workers, domestic workers, etc.	7915	Ready to cook food premixes are partially cooked, pre-processed, pre-blended foods where all the ingredients are mixed in predefined ratios to achieve the required taste, consistency and nutrition. They only need brief cooking with hot water in order to become full, nutritious meals. Dal Khichdi Pre-mix, Masala Bhat Pre-mix, and Masala Daliya Pre-mix were served
Ration Kits	Daily wage workers, domestic help, sex workers, people with disabilities, migrant workers, auto drivers, etc.	39,000 (Households); 156,000+ (Individuals)	Dry Ration Kits
Care Kits	Daily wage workers, domestic help, sex workers, people with disabilities, migrant workers, auto drivers, etc.	39,000 (Households); 156,000+ (Individuals)	Care Kits consisted of essential hygiene items such as soaps, sanitizers, face masks, and sanitary napkins

IBM's Amphan Relief Efforts

As a part of its swift response to Cyclone Amphan, IBM India worked closely with NGO SEEDs, and identified 'Pathar Pratima' district in West Bengal, as a key location for intervention, considering the devastating impact of the cyclone

	Total Beneficiaries Reached	Description of the Relief-Aid
Houses Built	40 (192 people reached)	Considering the long-term habilitation and basic sanitation services of the affected communities, 40 new houses with toilets were constructed using locally available materials.
Houses Repaired	134 (663 people reached)	Considering the long-term habilitation and basic sanitation services of the affected communities, 133 partially damaged houses were repaired with local participation.
Ration Kits and Care Kits	6550	1200 dry ration and hygiene kits were distributed to vulnerable and difficult to reach communities.
Water Filters Installed	4000	To prevent water-borne diseases and ensure safe drinking water, 50 community water filters were installed. The community representatives were also trained in the process of maintaining the water filters in the long run.
Health Camps	964	A mobile medical camp was organised in the district that offered basic medication, consultation, and investigation services.

Sattva's Approach and Methodology

Methodology for the Impact Evaluation Study

Sattva undertook a descriptive study design to systematically lay out the project outcomes based on various performance indicators. The evaluation framework was based on the Organisation for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC) principles to assess the relevance, effectiveness, impact, and sustainability of the program. The insights have been drawn using the 360-degree approach of data collection by gathering data from qualitative and quantitative methods by engaging with different stakeholders of the program. Quantitative data was collected through surveys conducted with 160 beneficiaries across four locations for COVID relief and 30 beneficiaries from Pathar Pratima, West Bengal for Amphan cyclone relief, whereas qualitative data collection was administered through FGDs and in-depth interviews with different stakeholders.

Key Insights of the Program

Covid-19 Relief



Beneficiaries displayed a high level of Satisfaction with quality and usefulness of kits received from IBM



Beneficiaries perceive the COVID-19 food kits from IBM to be extremely beneficial especially in terms of increasing consumption of nutritious food amongst their families



Families lacked 'chullahs' benefited from the cooked meals during the lockdown



The relief kits from IBM enabled families to make some savings to make further purchases on their basic needs and even basic health expenses



People on the ground are extremely satisfied with the care kits distribution during lockdown



The beneficiaries empowered by the sensitization of the best practices to prevent, and cope with COVID-19 infections through community sensitization

Amphan Relief



Families are Happy and have met their household requirements from Dry Ration Kits



Families were out of hunger and risk of any health diseases because of the ration distribution and health camps



Beneficiaries displayed a high level of satisfaction for getting their shelters repaired



Building new houses and reconstructing houses has saved families from the devastated impact after cyclone for long term



The increase in kits overall can be a vital role by giving beneficiaries more time to cope with uncertainties



Photo Credit: Nasscom Foundation