

Citi Bank N.A (CBNA) India
July 2022

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Context

About CBNA

Citi Bank N.A. (CBNA) is the consumer division of the New York headquartered financial services multinational Citi group. Citibank NA in India provides banking services and offers savings accounts, salary accounts, commercial banking, personal and home loans, term and senior citizens deposits, credit and debit cards, insurance, and asset management services.

CBNA India's CSR investments

Citi Franchise in India focused its CSR obligation across FY 2020-21 and FY 2021-22 on seven strategic pillars of focus - Art for Change, Pathways to Progress, Disaster (COVID-19) Relief, Bank for Good, Giving at Citi, Social Innovation Hub and Leadership for Tomorrow.

In FY 2022, CBNA CSR investments of INR 138.45 Cr were made towards 22 projects, across Citi's seven strategic pillars mentioned above. Under the grant projects, support was provided to facilities to improve their response to COVID-19 and to people adversely impacted by the pandemic, athletes, musicians, and those in need for curative/rehabilitative care. The projects also reported impact on indirect beneficiaries- youth and persons involved in rolling-out the interventions, hence having employment opportunities.

About the projects under review

CBNA India conducted third party impact assessments for 6 projects/programs that were representative of its CSR investments during the implementation period of April 2020 – March 2022 period. The selected projects/programs had outlays of more than INR 1 Cr during the respective grant years. Cumulatively, these six projects/programs had reported outreach to 15,83,861+ beneficiaries through various activities.

Outreach



15,83,861+
individuals*



1,77,500 + families

Ration Support to poor families



68,107 youth trained

Youth received skills training across domains



122,729 beneficiaries

Across various programs by CSMVS museum

Key activities and outputs



About 5500 ton of Ration Distributed

Distributed amongst families most in need



122,729

Beneficiaries from CSMVS programs



43,000+

Youth got employed post completion of training
under P2P



2,48,958

Vaccines through COVID-19 relief



9,14,000

Students of Haryana benefitted from
Sampark

SDG alignment



*Overlap of beneficiaries

Approach and Methodology

Scope of work

Deloitte was appointed by CBNA to conduct impact assessment of 6 projects/programs supported through their FY 2020-21 and 2021-22 CSR grants.

Approach

Deloitte carried out the impact enquiry through a thorough review of project related documents (provided by the implementing organizations), sample primary interactions with beneficiaries and key stakeholders, and visits to implementation locations (where appropriate). The objective of the assessment, executed along a 12-14 week period, was to ascertain the outcomes/impact of the initiatives through the following research questions:

- What were the intended or planned outcomes of the initiatives? Are the program's results in line with the anticipated outcomes?
- Did the evolving pandemic cause any disruptions to the initial program design, and what were the changes to the overall design to avoid potential program disruption? Has there been a disruption in impact due to remote program execution? Are there any potential strategies that could be deployed to combat this disruption?
- How do the beneficiaries and other stakeholders perceive the CSR initiatives undertaken?
- Ascertain any other challenges in implementation of the activities that are impeding optimal results.

The methodology for the data collection and design of the tools for specific projects/programs was based on a detailed desk analysis of the project related documents. The documents accessed were those shared by implementing partners (IPs) and CBNA CSR teams and included MOUs, project outreach and outcome data, beneficiary databases, M&E reports, and other project documentation. This provided understanding of the project model, achievements, and challenges prior to the impact assessment data collection.

The sampling of the respondents for the data collection was arrived at in consultation with the implementing partner (IP) and was based on a purposive methodology. The IPs network was leveraged to reach the most marginalized of the beneficiaries. The primary data collection in each location was done during the April - June 2022 period, based on the availability of beneficiaries and key project stakeholders. The data collection team leveraged both in-person and online data collection modes during the assessments. Elaborate details about the project/program specific enquiry and study tools deployed are presented in the following sections.

Stakeholder	Key points covered	Study tools employed
Direct beneficiaries	Nature of support provided Needs of the population specific to project objectives Feedback on the project execution Changes in access to training/ development/income generation opportunities Perceived social impact due to intervention	FGD, survey, case study
Indirect beneficiaries	Feedback on the project execution as per needs assessment Perception of impact delivered through the project Gap areas and needs that could be addressed through CSR support	KII, survey, FGD
Project management/field team	Project implementation Project monitoring Challenges	KII, FGD

Data collection

The data collection for the assessment was carried out with an approach to document multiple perspectives to validate the findings through triangulation. It was carried out as follows:

Promoting art, culture and history in society (CSMVS)			
Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- School/college students - School/college teachers - CoSTAR fellows/ Professional conservators - Museum visitors/General public - CSMVS staff - Other stakeholders	- MoU between CBNA and CSMVS - Project quarterly assessment reports for FY 2021-22 - Project completion report submitted by CSMVS - MIS of bus visits and objects conserved	110 student beneficiaries 4 CoSTAR fellows 4 CSMVS conservation staff	Relevance: Alignment to the importance of art, history and culture in the society Coherence: - Overall initiatives taken by CSMVS and their impact in promoting art and history Effectiveness/ Impact: - Program model and intended outputs/outcomes - Appropriateness of the programme strategy and Partnerships Efficiency: - Major factors driving success and key challenges/delays in implementation - Notable approaches Sustainability: - Increased awareness and interest in art and history post intervention - Improved knowledge and technical skills gained
Transforming public school education at 1 \$ per child (Sampark Foundation)			
Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- Primary Government school students (Grades 1 to 5) - Primary Government school teachers - Sampark trainers - Sampark monitoring team (Sparks) - District Elementary Education department - Other stakeholders	- Project proposal and Signed MoU - Project model documents - Quarterly progress reports and Review reports (FY 22)	10 schools in 3 blocks of 2 districts 315 Children 28 teachers 6 project staff	Relevance: Alignment of the programme to the learning needs of the primary school students Coherence: - Overall structure of support and the fit with the government school ecosystem - Extent of support provided to the students, teachers and schools Effectiveness/ Impact: - Programme model- Training of teachers by Sampark - Perceived impact/effectiveness of initiative: Application of Sampark training and use of TLM by teachers to teach students - Intended engagement level of students in English and Math - Developing experimental learning through TLM and Sampark Smart Shala app Efficiency: - Major factors driving success and key challenges/delays in implementation - Notable approaches of addressing challenges Sustainability: Continued use of teaching techniques and use of TLM to engage students

Pathways to Progress (Multiple training partners and service providers)

Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- Project Implementation Team - Youth who completed training with CWF - Community mobilisers - Trainers - Placement officers - Employers	- Project proposal and Signed MoU - Project model documents - Quarterly progress reports and Review reports (FY 22)	204 persons including trainers, mobilisers, placement officers, employers, and IP staff: 50 youth trained through Anudip, and 105 youth trained through FUEL 25 trainers 8 placement officers and mobilizers 16 program staff	Relevance: - Alignment of the programme to the needs of the community (employability, financial independence, empowerment) Coherence: - Overall structure of support and the fit with the ecosystem - Extent of support provided to the trainees, indirect benefit to trainers, mobilisers, placement officers, employers Effectiveness/ Impact: - Programme model- execution mechanisms - Perceived impact/effectiveness of initiative: successful completion of the course, placement, additional annual income, enhanced self-confidence, enhanced soft-skills - Intended and Planned outputs/outcomes - Appropriateness of the programme strategy and support Efficiency: - Major factors driving success and key challenges/delays in implementation - Notable approaches of addressing challenges Sustainability: - Quantum of Impact on beneficiaries and stakeholders - Identification of best practices

Umeed and Arpan (United Way Mumbai, Give India)

Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- Implementing partner teams from Jaslok - Logistics and project management agency 5 Community based organizations for beneficiary identification and mobilization - BMC/NMMC officials/ staff - Beneficiaries - Other stakeholders	- Project Proposals - Project quarterly assessment reports for FY 2021-22 - Project completion reports - Quarterly progress reports submitted by Give India - NAFARI quality check reports	114 vaccination beneficiaries 8 vaccination project staff a 12 NGO staff/volunteers who acted as community mobilisers 360 ration beneficiaries 10 community mobilizers for ration distribution	Relevance: Alignment to the larger health system, vaccine availability and community's nutritional needs in context of COVID-19 Coherence: - Fit in the disaster/ COVID-19 relief ecosystem Effectiveness/ Impact: - Intended and Planned outputs/outcomes - Appropriateness of the programme strategy and Partnerships - Support to curtailing spread and severity of COVID-19 at an ecosystem level Efficiency: - Major factors driving success and key challenges/delays in implementation - Notable approaches Sustainability: - Quantum of Impact on beneficiaries and stakeholders - Sustained change in absence of initiative

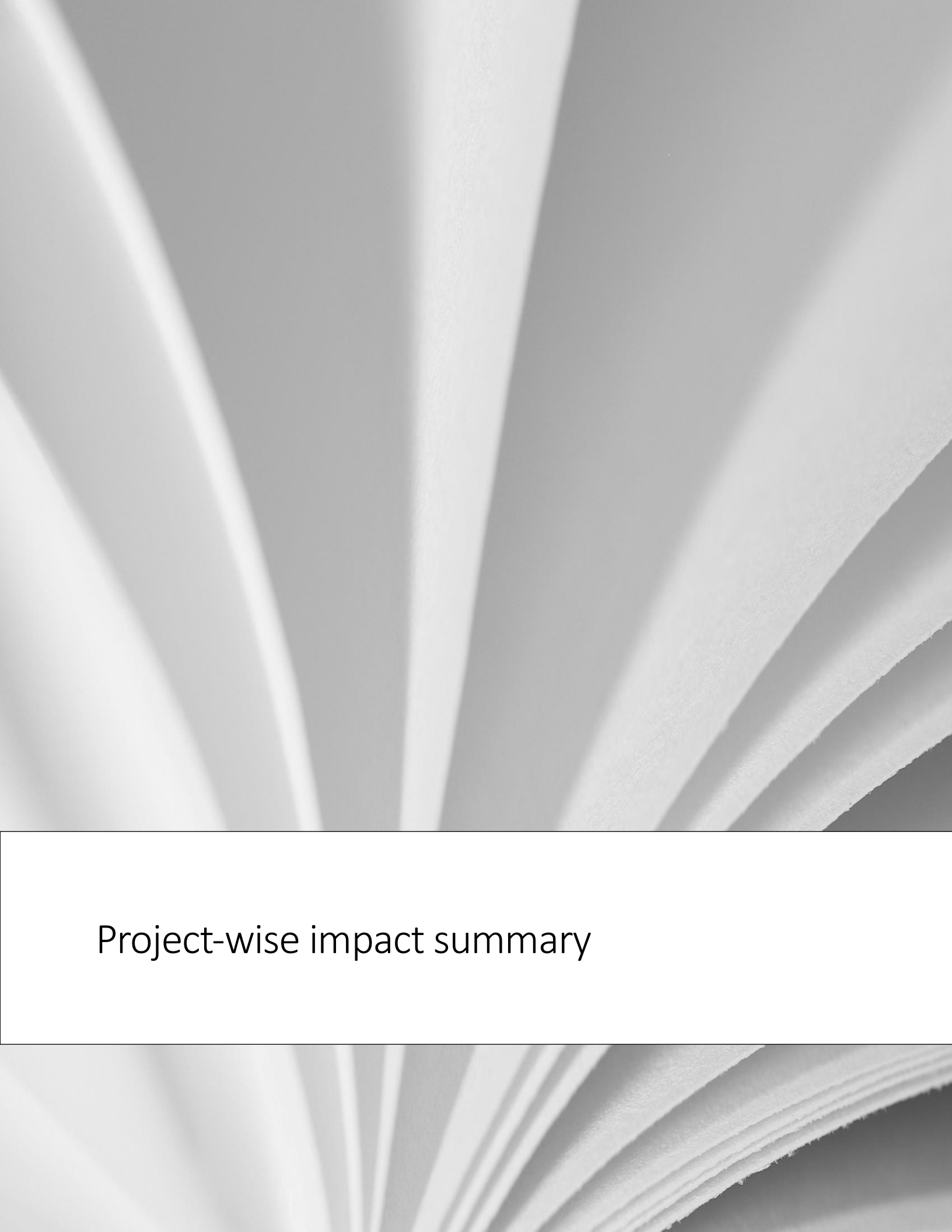
Citi Social Innovation Hub (IIT Kanpur)

Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- Project Implementation Team - CEO and founders of start-ups - Staff of start-ups - Programme management of start-ups - SIIC IIT-K programme staff	- Project proposal and Signed MoU - Project model documents - Quarterly Progress Reports FY 21-22	3 Founder-CEOs of start-ups supported 1 Director and Co-Founder of the start-up supported 3 IIT-K SIIC Staff	Relevance: - Alignment of the programme to the needs of the start-ups Coherence: - Overall structure of support and the fit with the start-up ecosystem - Extent of support and utilization of grant in launching and developing new products Effectiveness/ Impact: - New products developed - Innovation to develop solutions and create social impact - Appropriateness of the programme strategy and support Efficiency: - Major factors driving success and key challenges/delays in development of innovative products - Notable approaches of addressing challenges to develop low cost products with high efficiency Sustainability: - Quantum of Impact on society through products and services of the start-ups

Research grants to 6 start-ups (IISc, Bangalore)

Project Stakeholders	Documents reviewed	Primary Interactions conducted and Sample	Enquiry areas
- Direct beneficiaries Project Management/field team	- Project proposal and Signed MoU - Project model documents - Quarterly Progress Reports FY 21-22	2 Founder-CEOs of start-ups supported 1 Director start-up supported 1 CEO of supported start-up 1 SID staff member	Relevance: - Alignment of the programme to the needs of the start-ups Coherence: - Overall structure of support and the fit with the start-up ecosystem - Extent of support and utilization of grant in launching and developing new products Effectiveness/ Impact: - New products developed - Innovation to develop solutions and create social impact - Appropriateness of the programme strategy and support Efficiency: - Major factors driving success and key challenges/delays in development of innovative products - Notable approaches of addressing challenges to develop low cost products with high efficiency Sustainability: - Quantum of Impact on society through products and services of the start-ups

Limitations	- Assessments were based on a purposive sampling technique and was reliant on the IP's judgement and network. This may have led to positivity bias in the sample. Availability of certain beneficiaries/ respondents was restricted owing to their competing priorities/occupations - The project design did not include interactions with those excluded from the benefit, hence exclusion perspectives are not reflected in the Impact Assessment narrative. - Exclusive impact attribution to CBNA was not possible for the programmes implemented through combined funds from multiple donors.
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Project-wise impact summary



Promoting art, culture and history in society

Art for Change program implemented by CSMVS

Children exploring artefacts on Museum on Wheels bus, Deloitte picture records

CSMVS - Promoting art, culture and history in society

Introduction¹



Overview: CSMVS has received grants from Citi Bank N.A. (CBNA) to promote art, culture, and history in the society through Museum on Wheels and ConservArte initiatives under the Art for Change theme. The ConservArte project is a conservation and restoration initiative at CSMVS which aims to protect historical objects and artefacts through remedial and preventive conservation. Museum on Wheels (MoW) project supported by Citi makes museums accessible to everyone by bringing exhibits to schools and colleges through two buses modified as CSMVS bus museums.



Grant amount: INR 44,678,485
Project period: April 2021 to March 2022
Location: Maharashtra



Problem Statement: Art has been an integral part of society since ancient times. However, the modern society, equipped with gadgets and technology, is drifting away from art, history, and culture. A 2022 study by India Quotient Research found that more than 60% of its respondents lacked awareness about India's art, culture and history.³

Museums play a crucial role in preserving culture and promote awareness among the masses. With careful documentation and artifact preservation, a culture can be recorded and remembered regardless of its future. It can also be shared and understood by those from different cultural backgrounds.⁴ Art appreciation stimulates thought and analysis, provokes an individual to look past what meets the eye and open our mind to the views of others. Art appreciation is extremely relevant as it opens the stream of subconscious and intends to touch people that comes across it.⁵

The Citi-CSMVS ConservArte and MoW projects both contribute to promulgation of civilization's rich art and cultural heritage. While the former project results into preservation of important historical artefacts and builds capacities of young technicians in the same, the latter enhances the reach of the knowledge that the museum holds, in form of mobile exhibitions to a wider audience.

SDG alignment:



¹ Sources: Project model- MOU between CSMVS and CBNA |

Problem statement:

³Source 1: Most Indians don't know much about country's history, cultural diversity reveals new survey - First Post

⁴ Source 2: Why we need museums now more than ever - Museum Next

⁵ Source 3: The importance of art appreciation - Education World

Project model

Museum on Wheels

Feasibility study on evaluating the space, road safety and electricity availability of the site conducted.

Schools that unable to viist the museum are identified.

The school / college approaches Museum on wheels with their request to conduct the visit at their school

A schedule is created mapping the route across selected schools

Additional components:

Think Museum sessions
Online teacher and students workshops

Students basis their grades are identified in schools

Approval is sought from the school for bus visit
Schools that are interested in the program can approach CSMVS directly through email

Sessions are conducted in the bus to explain to the children regarding various objects are and their significance

Worksheet is provided at end of bus visit to access art and culture activities

ConservArte

The objects for conservation are chosen by the conservators based on factors such as the fragility of the objects

Based on the risk of the life of the object the objects are chosen to be conserved

Based on the activities, partners are identified

Based on the type of objects and technical aspects of the conservation centers , partners are identified

Distribution of responsibilities to the staff

Community engagement:

Exhibitions
Costar fellowship

Exhibitions to be conducted.
Research to be conducted
Lectures and events to be held

A risk assessment is done to evaluate the viability and feasibility of the conservation as well as to identify areas of concern

Conservation of objects and creation of climate control centres

Inputs

The model was delivered through various activities under the MoW and ConservArte projects. The key inputs for the programme included- conservation of museum objects, upgradation of art storage facility, upskilling of professional conservators through CoStar fellowship, bus visits to schools and colleges, curation of museums by students and online workshops on art, history and culture for students and teachers.

Process

The ConservArte programme was developed to protect the historical objects through conservation whereas the Museum on Wheels program is focused on improving museum accessibility and engagement of children in activities related to art and history. The process for both programs could be divided as preparatory phase, execution phase and final reconciliation activities.

Step 1- Preparatory phase:

- ConservArte: Objects for conservation chosen by museum curators and conservators. Curriculum developed for CoStar fellowship modules
- Museum on Wheels: Contact established with schools and colleges to finalize the schedule of the bus museum visit. Curation of bus museum finalized as per the themes decided by CSMVS

Step 2- Execution phase:

- ConservArte:
 - Objects undergo conservation process based on material, texture, and type of object. Preventive conservation methods were applied to objects which were not yet damaged but were susceptible to it given their age and material.
 - Art storage upgradation through reorganization of storage spaces like Natural History storage, European Paintings storage, work area refurbishment of the select storages, dismantling and refitting of storage components
 - CoStar fellowship delivered online as detailed conservation techniques are taught to the fellows. Fellows gain access to CSMVS for practical sessions to develop hands-on experience
- Museum on Wheels:
 - Bus museums visit the schools and colleges based on predetermined schedule. Beneficiaries consist of students along with teachers at these institutes. Visitors spend about 15-20 minutes in the bus and are given a guided tour by the CSMVS staff.
 - 3 online museum curation sessions delivered to students for Think Museum project. Students to select a theme and curate an exhibition at their campus using replica artefacts supplied to them through CSMVS
 - Online workshops delivered for students and teachers, covering different topics related to art, history, museums and culture

Step 3- Final reconciliation activities:

ConservArte: Object register maintained for documentation and verification of the conservation of objects. Art storage upgradation to be used for storing conserved artefacts which can later be displayed in art galleries of CSMVS.

Museum on Wheels: Bus modified as a museum returns to CSMVS and embarks on other locations as planned. Think Museum exhibitions are open to visitors and replica objects returned to CSMVS post completion of the exhibition. Attendance recorded for online workshops and further sessions are planned to disseminate art, culture and history knowledge.

Strategic differentiators



Outreach to wider audiences through the mobile museums



Strong partnerships with national and international institutions to bring and promote



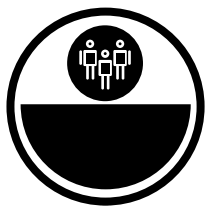
Focus on sparking interest of young generation in art/history and grooming young professionals



Seamless pivot to online program delivery through workshops for teachers and children

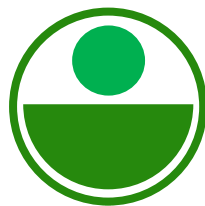
Impact findings

The assessment revealed that the project catered to promote art, culture and history in the society for beneficiaries like students, teachers and general public visiting the museum. The **CBNA supported CSMVS projects were able to reach about 122,729 beneficiaries** through the entire project.



122,729

Overall beneficiaries from ConservArte and MoW projects



23,605

Total number of objects conserved including preventive conservation



10,250

Overall beneficiaries from the Museum on Wheels bus visit



47

Young professionals upskilled through technical conservation methods

Impact created

Bringing back art to life through conservation

- The CBNA initiative resulted in the **conservation of 2491 items** at CSMVS. 313 significant items, including Tanjore paintings, the "63 Nayanars," Varahi Stone crafts, and Kodanda Rama, were preserved. **21,114 additional items underwent preventive conservation.**
- The curators, conservators and other staff working on object conservation reported satisfaction with the infrastructure, technology and methodology deployed in object conservation at CSMVS.
- Objects conserved are also displayed in the galleries and exhibits at the CSMVS museum to make them more accessible to the general public and generate an interest in art, culture and history. More than 100,000 visitors visited the CSMVS museum despite COVID-19 related restrictions during April 2021 to March 2022.



Art object Before vs after conservation. Picture courtesy: CSMVS

Exposure to updated conservation technology

- 100 % of the ConservArte staff reported increased exposure to art and conservation learning through on-the-job learning and through mentorship under the senior project staff.
- ConservArte storage personnel were satisfied working at CSMVS and reported enhanced learning opportunities in terms of specific processes like – coin conservation, documentation, object handling, fabrication, storage boxes and gallery mountings etc.

Building technical museology skills among young professionals

- The CoSTAR fellowship was given to 47 fellows in association with Harvard University.
- Highly technical conservation skills were imparted to the fellows in topics like painted surface studies, technical research on painted surfaces, painted surface analysis, microscopes for observations, practical sessions, and other technical skills for art conservation.
- Use of high-tech equipment reported by fellows along with exposure to working on practical skills enabling them hands on experience.
- Fellows reported enhanced understanding of conservation techniques learned at fellowship. Techniques learned were also utilized by the fellows in their respective institutes and organizations.

“The fellowship gives us access to the pioneers of art conservation and my knowledge about the field has grown manifold. There is a lot of focus on scientific aspects and that has provided a perfect platform to build technical skills”-

Afreed Mehta, Co Star Fellow

Exposure to music through MoW bus

- The visitors in the bus museum consisted of **students and teachers who were able to access the bus museum themed ‘In tune: The journey of Sound to Music’.**
- High engagement levels of students in the bus museum as **83% of the sample students confirmed liking the musical instruments available in the bus.** and 74% of the sample students responded liking interactive items such as the digital tabla and games on touchscreen tabs related to music, available in the bus.
- The students reported seeing unique musical instruments made from a variety of material like wood, bone and steel. **Many students saw various musical instruments for the first time in their life.**
- Students received goodies like workbooks and Do It Yourself (DIY) kits from the bus visit and 87% of the students reported using the kits as per the bus museum coordinator’s instructions.

Taking the museum into communities

- The project **enhanced the accessibility of museums for students as 69% of the students reported that they had never visited a museum before exploring the bus museum at their educational institute.**
- In addition, schools like SOS Alibaug where majority of the students come from underprivileged backgrounds, benefitted a lot from the bus visit as their interest in art, culture and museums increased post the bus visit.
- 53% of the sample students were not able to visit any museums as there was no museum in the vicinity of their place of stay. **Bus museum visit enabled these students to gain exposure to a museum setup and learn more about art, culture and history.**

Creating interest and curiosity for museums and history

- Knowledge on art, history and culture enhanced through the bus visit - **99% of the sample students reported that the information enabled them to understand art and history better.**
- Students displayed an inclination towards art and history as 58% of the sample students confirmed that the bus visit increased their curiosity and interest towards art, culture and history.
- The bus museum visit experience was appreciated by the students as **98% of the sample students confirmed that they wanted to explore a real museum post experiencing the bus museum.**

Curation of exhibition by students

- The students organized exhibits at their educational institution's campus working together in teams and collaborating with each other to decide the theme, objects, object placement etc. for the exhibition
- **75% of the sample students confirmed that their interest in art, history and culture enhanced post organizing the exhibition.**
- The Think Museum exhibitions were received well in the educational institutes of the participants as visitors showed curiosity about the objects and the exhibits. Students further reported that more than 100 visitors visited their exhibition per day.
- The **research skills of the students were enhanced as they read about the history and significance of the objects displayed – the knowledge that they would further pass on to the visitors.**

Skilling through learning – Think Museum project

- The Think Museum project enabled the students to learn one or more skills and 100% of the students confirmed the same - **students reported gaining skills like crowd management, basics of museology, teamwork, leadership, and research through the Think Museum project**
- None of the students had no prior understanding of museology, and **96% of them said that the Think Museum workshops helped them learn the fundamentals through hands-on, applied learning.**
- The students reported working closely on executing the Think Museum exhibition and 96% of the sample students agreed that they learned teamwork and collaboration from the Think Museum

Recommendations and way forward

Some recommendations that CSMVS can consider enhancing effectiveness of the programs are as follows:

- Revising the bus roster to spend more time at a site that would allow the students to spend adequate time observing the exhibition
- Distribution of learning materials like pamphlets, worksheets, web links etc. related to the theme of an exhibition that can help visitors discover more about a topic even beyond the bus visits.
- Explore inclusion of schools catering to the more marginalized communities through partnerships with resource poor private schools or State Education Depts.
- Exploring an alternate revenue model by introducing a nominal fee from well-off visitors including private schools/colleges that will allow for cross subsidization and sustainability in the long run.
- Promote the Think Museum exhibitions curated by students on their social media and website to generate interest in museums and to recognize the work of students. Further, a similar intensive and hand on model can be explored to enhance engagement of select MoW beneficiaries.
- Onboarding the teachers and students of all the schools where the bus has visited for online workshops to build their capacity towards understanding art and history. This will ensure a more lasting impact where students and teachers will gain more knowledge through discussions to build awareness,

Stories from the field

66
99

"Our students loved the bus visit and were curious to know more about the artefacts in the bus. No one had ever seen anything like this. Everyone in the school visited it and had an engaging experience, learning about music and its history"

- Ms. Nishigandha, Activity Coordinator – Ashoka Universal School on Museum on Wheels bus visit

66
99

"The CoStar fellowship has taken me out of my comfort zone and made me appreciate the vast the world of museology and conservation is. The science and techniques behind conservation are highly technical and very well taught"

- Ms. Neha Shah, CoStar fellow under ConservArte program

Think Museum – Learning museology through museum curation

Amity University, Mumbai

CSMVS Museum on Wheels program

Think Museum session at Amity University was organized by a group of 30 students in the campus reception area. Most of these students were from Bachelors/Masters in Travel and Tourism course and had never experienced curation of an exhibition before. Students were informed about this opportunity by their professor and wanted to try their hands at something new so that they can expand their knowledge and get out of their comfort zone.

Prior to organizing the exhibition, the students went through three online sessions which enabled them to understand what they had signed up for. On the third session, they got together for an hour in the classroom and brainstormed about different themes and ideas which can be implemented for the exhibition. Finally, the theme 'Different ages through history' was decided by the group and preparations went underway with planning of lighting, space management, crowd routes, information sessions etc. On the day of the exhibition, every student played their part and managed a range of activities. The exhibition received a great response and was attended by more than 100 people. Students at Amity University gained exposure to a variety of skills like teamwork, research, basic museology, object placement and crowd management. The students thoroughly enjoyed this experience and look forward to organizing more Think Museum Exhibits in the future.



Transforming Public School Education at \$1 per child

Giving at Citi project implemented by Sampark Foundation

Student using Sampark S-Box. Picture courtesy: Sampark Foundation

Sampark Foundation- Transforming public school education at \$1 per child

Introduction²



Overview: The year-long project implemented by Sampark Foundation aims to enhance the pedagogical approaches of 17,390 teachers from 8,736 primary schools by providing them with Teaching Learning Materials including Sampark Smart Shala Mobile Application. In addition, 8,736 Haryana Government Primary Schools will be transformed into smart classrooms using S.Boxes. The project activities are intended to improve foundational English and Math learning outcomes among 9,14,000 children enrolled in the schools.

The specific objectives of Citibank's funded project are to build capacities of and support 17,390 teachers through the following:

- To provide Sampark Smart Shala Mobile Application to teachers and 4,350 S. Box to the schools to transform them into Smart classrooms
- To provide training to teachers on S. Box to enable, empower and inspire them to become the facilitators of learning
- To improve the reading, writing and arithmetic levels of children by engaging the government in owning and delivering the program, the model is one that will be sustainable



Grant amount: INR 4,29,000,00

Project period: April 2021 to March 2022

Location: Haryana



Problem Statement: Education in India depends on textbook-centric curriculum and pedagogies of teaching. This preference is largely systemic – a part of institutional and bureaucratic system where schools and teachers propagate the same learning methodology. In addition, there is a lack of adequate facilities and infrastructure to create a positive educational environment for teachers and learners. Simultaneously, teachers experience a lack of autonomy in deciding their pedagogy.¹ The National Achievement Survey (NAS), 2017 highlighted the need for reforms to influence teachers' attitudes towards teaching.¹ Specifically, there is a need to make their pedagogies more interactive and student-centric rather than rote memorization and make classrooms inclusive spaces for not just reading but learning.

SDG alignment:



² Sources: Project model- MOU between Sampark and CBNA

Problem statement:

UNESCO. 2021. No Teacher, No Class: State of the Education Report for India 2021.

Ministry of Human Resource Development. 2021. National Achievement Survey (NAS) 2017: National Report to Inform Policy, Practices and Teaching Learning

Project model

Inputs

Sampark Foundation engages multiple stakeholders, focussing on the teacher to provide a joyful learning experience to the children. The model has demonstrated a successful partnership with the State Education Department of Haryana and Sampark Foundation has been a preferred partner for the Foundational Literacy and Numeracy program (FLN) aligned with the State's ambitious 'Nipun Haryana Mission'. The description of the aspects covered by CBNA funding is provided below:

Partner With the Government

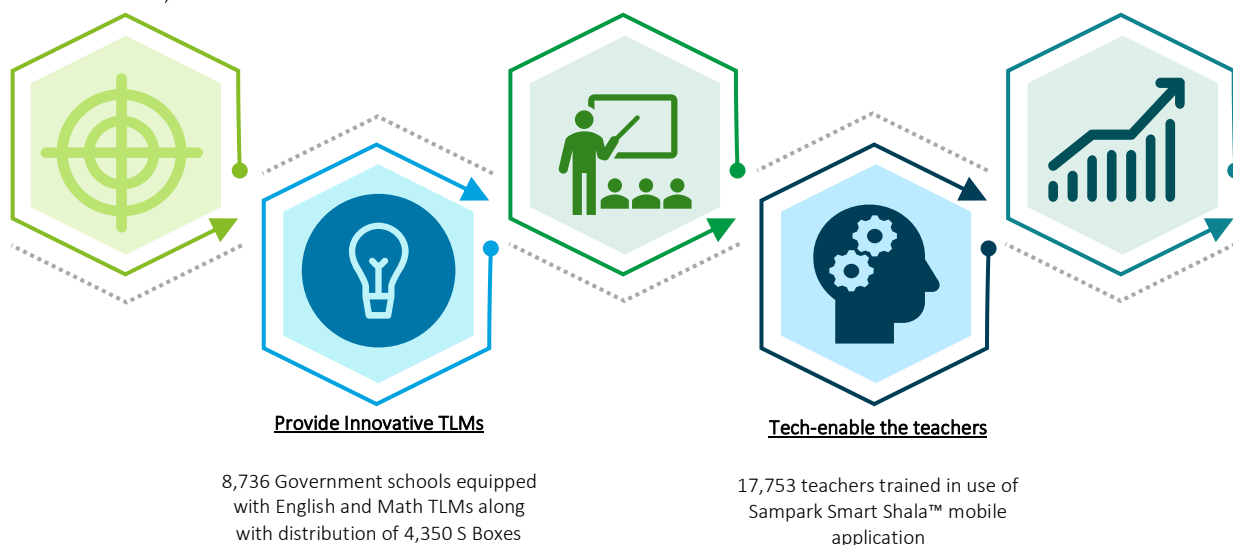
5-year MoU between Sampark & District Elementary Education, Haryana to roll out Sampark 'Smart Shala' across 8,736 schools

Teacher's Training

17,753 teachers trained in use of English and Math TLMs in classrooms

Monitor

435 schools monitored by SPARKS through regular visits along with support to teachers in content dissemination



Process³

Sampark Foundation has an innovative model to deliver the program through technology, trainings and partnership with the government.

- **Partner with the Government:** Sampark partners with the State Government Education Department through a structured five-year Memorandum of Understanding (MoU), which provides access to Sampark to go ahead and intervene in primary schools and work across relevant stakeholders.
- **Provide innovative TLMs:** Government schools are equipped with interactive activity-based Teaching Learning Materials (TLM's) in English and Math to enhance learning outcomes of children by making it a fun and joyful classroom experience
- **Teacher's Training:** As teachers are the focus of Sampark's program, two teachers teaching grade 1-5 in each intervention schools are trained. The trainings are unique and interactive as the teachers get an understanding of how to deliver each concept using the manipulatives in the classroom.
- **Teach-enable the teachers:** Teachers beyond pedagogy are trained on using the Sampark Smart Shala™ mobile application which provides simple and engaging content in Hindi that make learning more fun in school and at home.
- **Monitoring:** Sampark monitors the implementation of the program through regular visits by dedicated SPARKS who also provide on-site support to the teachers

³ Source: Process discussions with IP and Citi

Strategic differentiators



System Strengthening approach for sustainable outcomes aligning with Nipun Haryana Mission



Agile programming allowing for need-based innovation



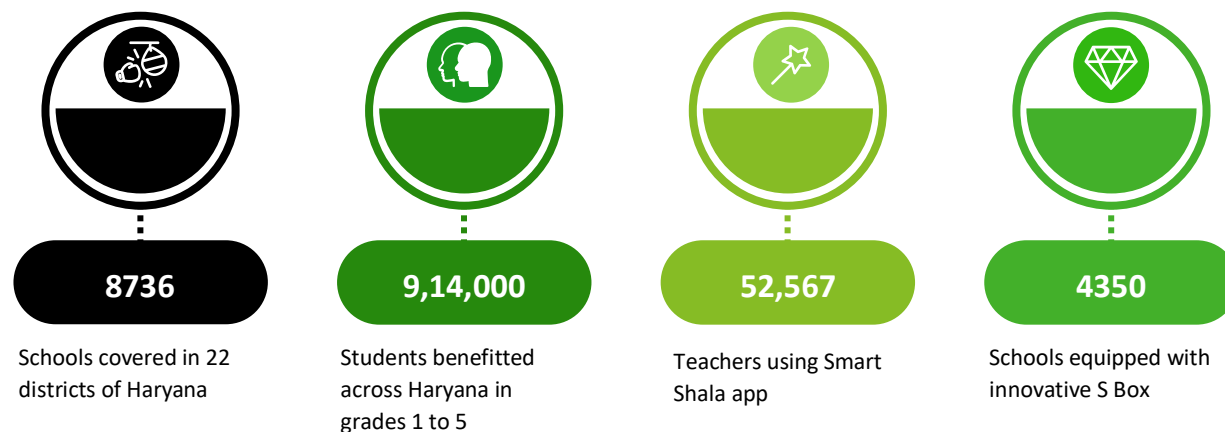
Pre-loaded content, which is delivered in local language and allows usage in low network areas



Enhanced monitoring through SPARK and key government officials, such as CRC and BRC

Impact findings

The account presented below is based on the analysis of survey responses and a content analysis of the narratives recorded during Deloitte team's interactions with multiple sample stakeholders including beneficiary students, teachers and Sampark SPARKS and staff.



Impact Created

Training and capacity building

- According to Sampark, **18,026 instructors were trained in fundamental literacy and numeracy, which includes pedagogical and technological components.**
- The teachers reported receiving training from Sampark on the fundamental reading and numeracy programme, both in person and online, the same was confirmed through survey responses as 100% teachers confirmed receiving trainings
- Of the 79% of instructors who attended training in person, 21% also participated in both in-person and online training.
- **Compared to more traditional teacher training programmes run by other departments, 7 out of 10 instructors thought Sampark's training was interesting, fun, and educational.**
- **95% teachers reported that the training was engaging and effective as the training covered essential topics on how to engage with children.**
- Eight out of ten instructors said that the training, TLMs, and Sampark Smart Shala application had given them the tools they needed to successfully adopt and showcase new teaching methods. They also emphasised the value of the Sampark Smart Shala app for disseminating the curriculum online.
- The teachers reported that, in contrast to earlier methods of teaching with a blackboard, **the strategies they learned throughout the training have made it easier for them to offer each student in the classroom the individualized attention they need to succeed.**

Enhanced classroom engagement and student participation

- 100% of the teacher sample reported that due to the Sampark training they learned new techniques of engaging students in the classroom. **Teachers adopted the Teacher Learning Material (TLM) to reduce the preparation time for their classes as 100% teachers reported to use structured material for teaching English and Math.**
- **Confidence level of teachers in terms of implementing the use of Sampark TLMs is high** as 68% of the teachers rated themselves 'Very confident' in teaching through TLMs
- All teachers in the study sample reported of learning new student/classroom engaging practices during Sampark trainings. **9 out of 10 teachers reported that the Sampark supported material has brought efficiency pertaining to focused instruction time in the classroom.**
- Over 80% teachers stated that due to Sampark's training, both online and offline engagement with children became effective as they could use the TLM in classroom to teach English and Mathematics. They were also able to **engage children effectively in online mode during lockdown through the Sampark Shala application.**
- Sampark's interventions have brought about a change in learning outcomes of the students as 85% children reported learning English and Math through the conventional blackboard methods prior to learning from the Sampark supported TLM. However, post Sampark intervention 100% children reported to learn English and Math through the Sampark supported TLM.

Student learning outcomes

- Majority teachers during interactions expressed that **100% students across grades 1 to 5 were less fearful about learning English and Math post introduction of the Sampark methods.**
- During interactions, **children stated that the usage of TLM by the teachers and the play-way method utilised to deliver lessons in the classroom were the key reasons for their newfound liking** of the subjects.
- Due to the use of pedagogical strategies and successful implementation of TLM learned during the Sampark programme, teachers have noted that students are now more excited, attentive, and actively participate in class by replying to questions.
- 100% children reported to learn English and Math through the Sampark TLM. **60% of the students confirmed experiencing improvements in academic levels in English and Math.**

Recommendations and way forward

Some recommendations that Sampark Foundation can consider enhancing effectiveness of the program both within the CBNA project and beyond, are as follows:

- While the kits currently contain materials for hands-on activities and the innovative Sound Box, evaluate adding more visual aids content.
- Distribution of S Box at the school level ahead of the new academic cycle, further supporting infrastructure such as television and electricity in place can ensure effective and continued usage of digital learning material provided by Sampark
- To re-evaluate the digital divide among children and provide impetus to uptake the Sampark app at home. Explore and introduce avenues of involving parents in the children's learning journey right from the design of the program.
- Explore feasibility of introducing TLM model in other major subjects like EVS and Hindi – this is aligned to the needs expressed by students.
- Devise a formal rewards and recognition program for best performing teachers in form of appreciation awards and incentives to drive teacher motivation across the state. Introduce frequent teacher learning and knowledge exchange sessions to showcase best practices across schools.

Stories from the field

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“We like the TLM’s of Sampark and they are very useful to understand a concept. We also want TLMs and kits for Hindi subject”

– Students, Government Schools, Gurugram and Faridabad, Haryana

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“The assessments conducted due to the application has made the entire process easy as well as convenient to track the progress of the child”

– Teacher, Government School,

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“I was very weak in English and Math and did not like the class. After learning through TLM’s and Sampark Didi now I am proactive in class and doing well in the subjects”

– Student, Government School, Gurugram, Haryana

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“The Smartshala application has helped the children in our school to become smart and engage with learning in a fun digital way”

– Teacher, Government School, Faridabad, Haryana

Learning like never before Primary school in Ballabgarh



Children at Sunped, a rural primary school in Ballabgarh, Haryana have learnt Math through the conventional methods of practicing on blackboard and textbooks prior to the introduction of Sampark Teaching Learning Material (TLM). During this phase, children often could not visualize numbers and basic concepts of Math, making the learning experience boring and not practical.

However, post the introduction of TLM by Sampark and the class teacher being equipped with using innovative techniques, the engagement levels and learning experience of children completely changed. A popular play money game used to teach basic addition, subtraction and number value system is the most popular methodology cited by students.

The children expressed that, play money helps them to appreciate the practical usage of Math in day-to-day life – this has made the subject interesting to learn.

Further, these games and concepts have helped the children to take back the learnings at home. They help their parents with daily money management and day to day transactions while buying groceries etc.

Building capacities of teachers through training and teaching aids

Primary school teacher



When the Sampark TLM was introduced, Ms. Preeti was not sure how she would be able to use this to teach. She mentioned that teaching all subjects to students from grade 1 to grade 5 can be difficult sometimes as children's attention span is very short. She would always struggle to find ways and means to keep children engaged and involved along with making them learn and understand what is taught in class.

Sharing her experience of training from Sampark, she stated that she received training on use of the TLMs, Sound box and the Sampark Smart Shala application. The training was conducted well and was able to effectively learn use of it.

The training and use of the TLM's has helped her conduct the class effectively. She does not have to repeat as often now as children are very attentive due to the enhanced engagement through TLMs and teaching methodologies. Children are excited to learning English and Mathematics and their confidence has got enhanced.



Pathways to Progress

A flagship Citi youth skilling program implemented by multiple partners

Counselling session in progress, Picture courtesy: Bandhan Konnagar

Pathways to Progress- a CBNA youth skilling project executed by 7 implementing partners

Introduction⁴



Overview: The CBNA CSR grant was towards 18-month skill training projects, under Citi Group's flagship Pathways to Progress (P2P) initiative. Pathways to Progress was conceptualized with a vision to address the skills mismatch and equip young people, particularly those from underserved communities, with the skills and networks needed to succeed in today's rapidly changing economy. CBNA supported program aimed to provide skills training to ~67,000 youth (33,712 women and 34,395 men) across Maharashtra, West Bengal, and Karnataka, during the March 21 – September 2022 period. The training across 19 courses from 7 industry sectors, was facilitated by domain and employability / life skill trainers and was deployed through training partners.

The specific objectives of the initiative were:

- Training ~43% women at the Pathways to Progress portfolio level
- Standardised job role specific training content hosted on a digital platform and delivered by certified trainers through a hybrid mode - combination of centre-led blended and online trainings
- Generate greater economic value with 'near-assured' employment (~70% placement) with suitable salary as per market standards

In October' 2021 the program (except the Bandhan project) was fast tracked to a 12-month skill training program that would conclude by March 2022 while continuing with the original objective.



Grant amount: Total CBNA grants of is INR 33,41,43,701 disbursed over FY 2021 and FY 2022

AIF	Anudip	Bandhan	Centum	ECHO	FUEL	Udyogini
INR 2,80,74,375 (FY21)	INR 4,06,17,868 (FY22- INR 1,47,27,243)	INR 1,62,25,268 (FY22- INR 70,16,626)	INR 6,84,72,000 (FY22- INR 3,42,36,000)	INR 4,79,05,989 (FY22- INR 2,39,52,994)	INR 4,26,87,320 (FY22- INR 2,13,43,660)	INR 9,01,60,881 (FY22- INR 4,50,80,440)



Problem Statement: There is not enough space for experiential learning in the current education space, hence the curiosity of the youth is not sparked. Additionally, employability of the youth is major challenge, which can be addressed through employable skill trainings.

Maharashtra, Karnataka and West Bengal have a large youth population that lack industry required skills and training to make them employable. This also results in lower salaries to trainees and often results in high rate of attrition. Traditional ways of teaching, high out-of-school rates, lack of creative thinking and problem-solving abilities to excel in life, further aggravates the problem. To address these issues, Pathways to Progress partners selected market relevant courses and disseminated training using effective methodologies using digital solution.

SDG alignment:



⁴ Source: Progress reports shared with Deloitte

Problem Statement Source: Impact of logistics Industry on Economic growth amidst a pandemic- The Hindu

⁴ Source: World Bank Report- The Education Crisis

Source: Skill Matters- National Skill Development Corporation (NSDC)

Project model



Inputs

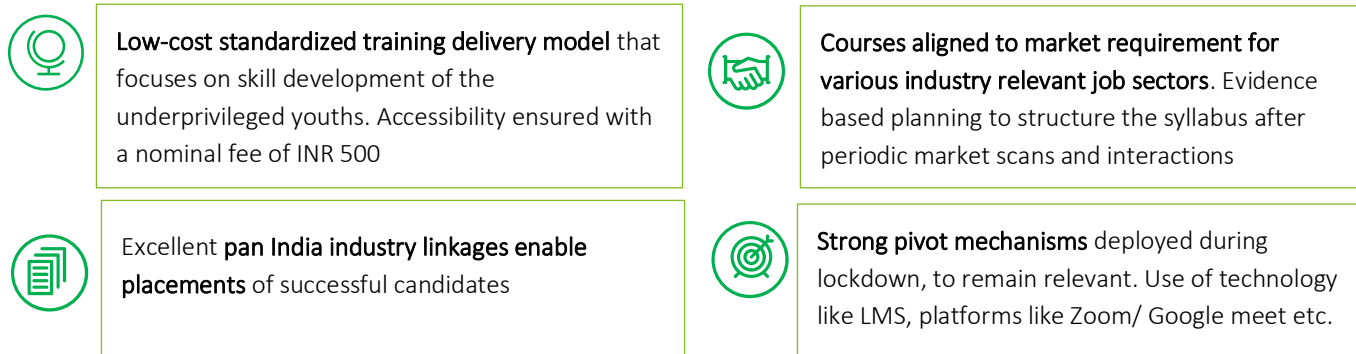
Edubridge and Excelus provided Training of Trainers (TOT) and finalization of the Learning Management System (LMS). A total of 390 trainers across the Training partners were trained in total on dissemination skills and facilitation methodologies, and in the P2P LMS. The trainers hired by the partners had extensive experience in the domain area and delivered training across 19 courses. The courses were offered to trainees at a nominal fee of INR 500. Digitisation of training curriculum and access to LMS helped in delivery of training in both online and blended mode.

Process⁵

The classroom based programme activities were delayed due to the pandemic. The partners had to pivot to online delivery mode. Once lockdowns were lifted, centres started functioning in blended modes.

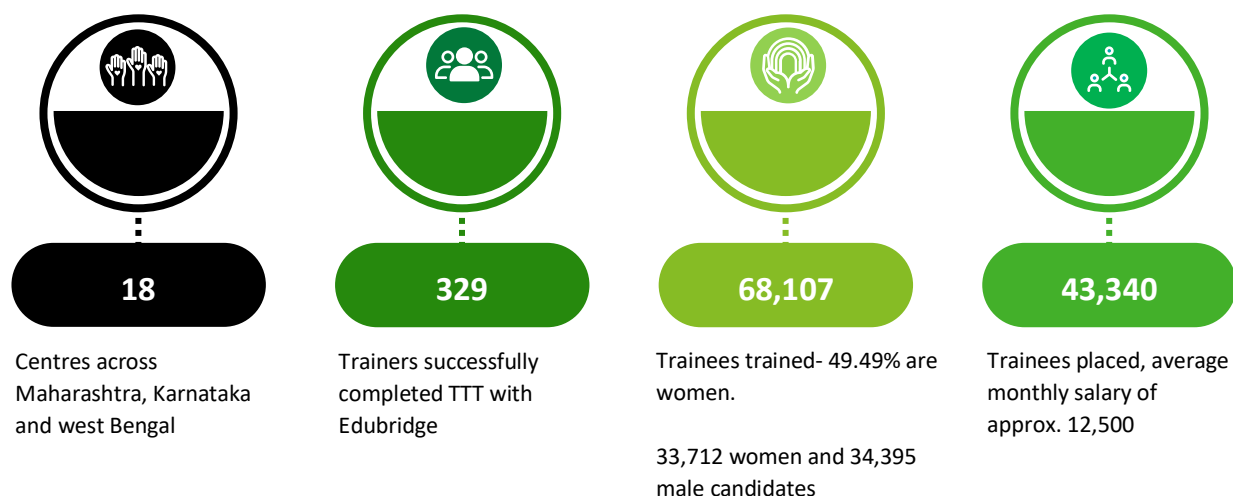
- **Mobilisation and enrollment:** This was done both online (through platforms like Facebook, Whatsapp, Zoom, Google Meet etc.) and in a physical mode. The campaigns and webinars allowed the potential students to interact with the facility. Several meetings were carried out at universities, colleges, CBOs, and gram panchayats. Counselling was done to identify all parameters of student match and course work rigour. Students were enrolled after verifying household income and parental counselling.
- **Content Delivery:** Content delivery and management were done by Excelus LMS and delivered in online/blended mode.
- **Assessment:** Fortnightly assessments were carried out and a minimum of 50% of marks were required to clear the assessment. This assessment was delivered through, and scores stored on LMS module.
- **Post course completion:** Trainees were provided with pre-placement coaching to set expectations and introduce various job roles. Vacancies were mapped and partnerships were leveraged to get placements. Post placement retention rates of candidates was tracked for 3- and 6-month period.

Strategic differentiators



Impact findings

The programme provided support to upskilling of youth through trainings at centres under different domains. The record of impact for the project is as mentioned below:



⁵ Source: Process discussions with IP and Citi

Impact Created

Enhanced skills and knowledge through standardized training

- The trainees displayed enhanced knowledge about their training domain during the interactions . Trainees were highly satisfied with the training material, and training delivery. 94% confirmed the mentoring support provided by their respective trainers and the teams.
- Candidates reported that the mode of training did not affect the quality of their training experience as **75% of the selected trainees confirmed that they were comfortable in attending trainings in both blended and online mode.**
- About **90% of trainees said that despite possessing formal degrees or certifications, they had trouble finding employment before the Pathways to Progress (P2P) programme** because they lacked the necessary skills required to get employed

Technical skills with domain knowledge

- 72% of the candidates reported recall of 4 or more training lessons taught during the interaction. The most recalled sessions were, Career planning (31), MS Office (15), Database management (16) and Client relations management (15).
- **High level of computer competency observed in the trainees as they had hands on experience in using MS Office apps and had developed an understanding of operating system in the computers and laptops.**
- Trainees reported having better understanding about the newer market relevant skills that they attributed to access to learning resources such as LinkedIn learning.

Soft skills to improve employability and confidence

- Candidates reported improvement in communication skills (99%), enhanced confidence (99%), and attributed ability their employment status to the training programme (100%). It was reported that there were improvements in self-confidence, language and proactiveness in the candidates.

Other pursuits

- 68% candidates reported that after earning the training certificate, they would want to pursue higher education. Some candidates started taking classes online to further their education.
- **96% of the candidates reported increase in household income and improved social linkages due to income security.**
- **96% of the student sample reported improvement in critical thinking skills including decision-making and developing an entrepreneurial mindset.**

Employer feedback

- 98% employers appreciated the support provided by the implementing partners. **All the employers in the sample were impressed by the excellent skill set of the trainees they had hired, their positive attitude and zeal to learn.**
- **96% employers were appreciative of the communication and presentation skills among placed candidates.**

Recommendations and way forward

The following design changes can be considered for more optimal and effective delivery of the Pathways to Progress initiative:

- Exposure/ industrial visits and in-person practical classes, an in person employability sessions across training partners to enhance the experience and learnings for fresher trainees in a post COVID-19 world
- Communication and presentation skills modules should be aligned as per the industry needs - explore delivery through special/ guest sessions and projects/ tasks through the training period.
- In-person Training the Trainers (TTT) can be considered for the newer cycle that would allow for enhanced peer learning and allow for efficient management of the batches.
- The functionalities of the LMS needs improvisations to enable ease of use. Refresher sessions in LMS for Trainers.
- LMS content could be made more interactive by adding animations, videos, and linkage with external learning platforms to enhance its effectiveness. AV content enabled a high recall of concepts among the trainees

Stories from the field

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"I had received my bachelor's degree and was still unable to find a job. That's when I came across FUEL, and I am grateful to be a part of their program. Not only did I get skills through the developed but also today I am placed with ITC In Protech and draw a monthly salary of INR 33,000 p.m."

-Aniket Sawant, Alumni, FUEL, AI Course (Pune)

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"The course has equipped me with technical skills and boosted my confidence. The support from Anudip and the trainer was great. Although the training was online, quality was never compromised. The mock interview conducted was also very beneficial in preparing for the placement process. I am now working with Diamond Harbor Town Youth Computer Training Centre and drawing a salary of INR 7,500 p.m."

– Anushree Mondal, Alumni (CEDL Course, Anudip)

Rupanjana Chakraborty

Business Correspondence Business Facilitator Course, West Bengal



Rupanjana Chakraborty is from Gobardanga in the district N 24 Parganas, a small town in West Bengal. Her father was employed with an organization, and they are a family of five. Being from a small town, she couldn't gather required professional exposure to crack an interview and secure a good position with a reputed organization. A college friend shared information regarding Citibank's Pathways to Progress project at EduBridge. After inquiry, she came to know that this course is being taught online and involves placement support. Without wasting time, she got enrolled and started training. Post completion of the training, she got selected during her first interview in HDB Financial Services Ltd. through a job fair conducted by EduBridge. She feels that the Employability Part of the training along with the

Banking Sector related concept helped her most to crack the interview. She wants to thank EduBridge Learning and Citibank for such a wonderful opportunity .

Sayari Das

Kolkata, Alumni, Anudip Foundation



Sayari has completed Certificate in English communication and Digital Literacy, from Anudip foundation. Currently she is placed with Swadesh Infotech with a monthly pay of INR 8,000. She got this job within 1 week of completing her course. She feels confident to say that her technical skills have been enhanced post the training program. Along with this she feels confident about her command over English language.

Prior to joining this course, her total family income was INR 10,000 p.m. and now it has gone up to INR 18,000 p.m. She has referred a lot of her friends to Anudip's courses also because this has proven to be very helpful for her and has given her a good start in job market. She aspires to excel in her career and has received support from all trainers, mobilisers, and the placement officers.



Umeed and Arpan

Vaccination and ration distribution projects implemented by multiple partners

Rations kits being prepared under the Arpan Project, Deloitte picture records

United Way Mumbai and Give India- Umeed and Arpan Introduction⁶



Overview: The CBNA CSR allocations towards COVID-19 relief were originally envisaged in the year 2020-21 and executed through partnerships to facilitate a nomination-based Ration programme in Mumbai (implemented by United Way Mumbai). Based on the evolving pandemic and its socio-economic impact, the program was later converted to direct vaccine programme at Mumbai, and a ration distribution programme at Kolkata and Bangalore.

The Vaccine component of the COVID-19 relief programme was executed in through Jaslok Hospital (Vaccine procurement and medical partner), and support from ground level NGOs in mobilising the beneficiaries. The vaccine programme was targeted to reach 2,00,000 people from high-risk and vulnerable population groups in Mumbai (Dharavi, Mumbai and Navi Mumbai locations).

The Ration component of the COVID-19 relief programme was executed through multiple partnerships with Buzzwomen (for distribution in Bangalore rural), and Give India (for distribution in Kolkata). and the ration programme delivered 50000 units of rations in rural locations (Karnataka) and 127565 units of rations in urban locations (Kolkata).



Grant amount: INR 4376000000 (INR 61,10,00,000 FY '21 grant + INR 3,76,50,00,000 FY '22 grant)

Project period: April 2021 to March 2022

Location: Maharashtra (Mumbai (Dharavi) and Navi Mumbai), Kolkata, and Karnataka (5 rural districts near Bangalore)



Problem Statement: The COVID-19 pandemic has caused loss of lives and livelihoods across the country. The people most affected with the challenges of COVID-19 were those belonging to lower income groups, with limited access to healthcare and loss of employment. The surges in 2020, 2021 and 2022, and the consequent lockdowns pushed a large chunk of people to the socio-economic vulnerability causing lack of ability to access healthcare, adequate nutrition, and livelihood opportunities.

The COVID-19 surges and the consequent job losses caused extreme poverty among those with daily-wage jobs, and those without socio-economic support mechanism were pushed to hunger and lack of nutrition¹. Large groups of families were left without access to food materials and rations¹.

Despite availability of vaccines in the country by January 2021, and subsequent resolution to make vaccines available to all citizens over 18 years of age, most citizens were unable to access them till July/ August 2021. In addition, the registration on the COWIN portal to book a vaccine slot required digital literacy, hence excluding several groups of people, otherwise at higher risk due to job profile or socio-economic condition, from accessing vaccinations¹.



SDG alignment:



⁶ Source: Project MOUs FY 20-21, 21-22

⁶ Source: <https://www.oecd.org/coronavirus/policy-responses/covid-19-and-the-food-and-agriculture-sector-issues-and-policy-responses-a23f764b/>

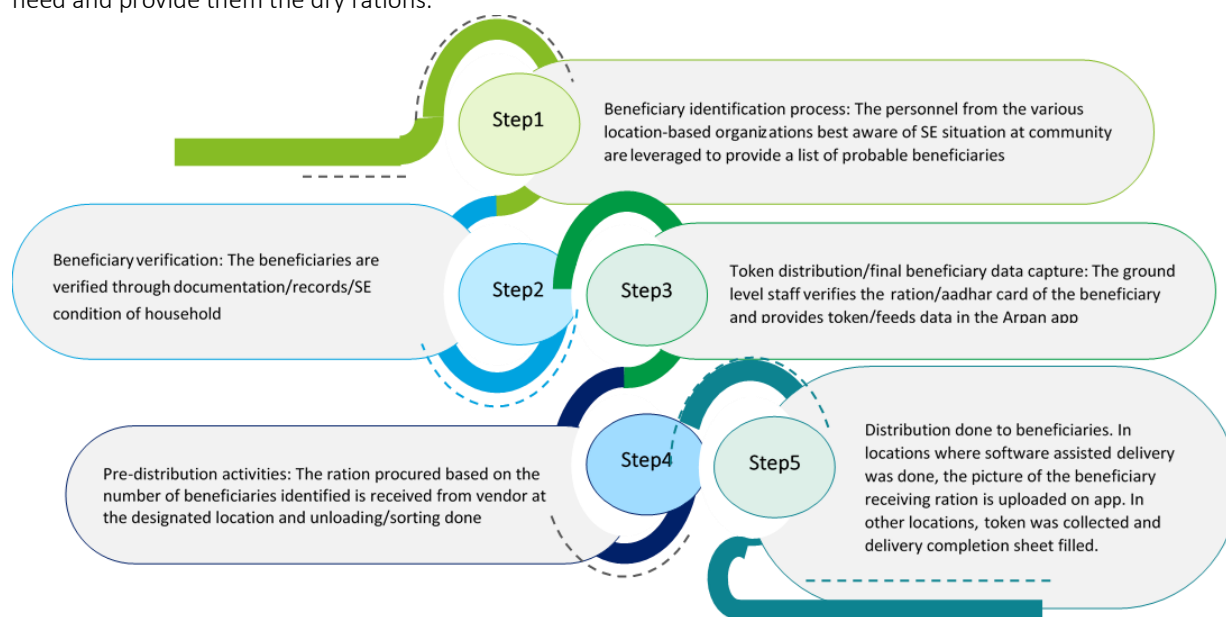
Source: https://www.who.int/docs/default-source/searo/ncd/dr-chizuru---healthy-diets-the-double-burden-of-malnutrition-and-covid-19.pdf?sfvrsn=c9e82bc7_2

Project model

The intervention model for COVID-19 relief programme was adapted separately for the vaccine administration and the ration distribution initiatives. The vaccine administration model was built to facilitate the process of the COWIN portal related to Aadhar linked beneficiary information updating, whereas the ration distribution model facilitated better accountability in the system related to beneficiary identification and ration provision.

Ration distribution model

The Ration distribution model supported by Citi consisted of 5 steps as illustrated below to identify the persons in need and provide them the dry rations.



Inputs

The Ration distribution model was executed through various partnerships for beneficiary identification, verification and the record of the distribution process. The primary execution across locations was facilitated through a vendor identified for the camp management and logistics mapping process. Several local organisations, including Kolkata Rescue (Kolkata), Buzzwomen (Karnataka), and others assisted in the identification and mobilisation of recipients due to their knowledge of the socioeconomic profile of the beneficiaries, the on-the-ground organisations were given the responsibility of identifying the beneficiaries.

Process⁷

The programme activities were designed to be delivered through the combined effort of the mobilising beneficiaries, procurement of raw materials and its packaging, and last mile distribution among verified beneficiaries. The COVID-19 relief programme did not require any pivot of activities through the course of implementation.

- Beneficiary identification and verification
 - The beneficiaries identified through Buzzwomen's 'Gelathi' (village level/community leader) in Karnataka. Similarly, a group of community health workers at slums carried out the same in Kolkata

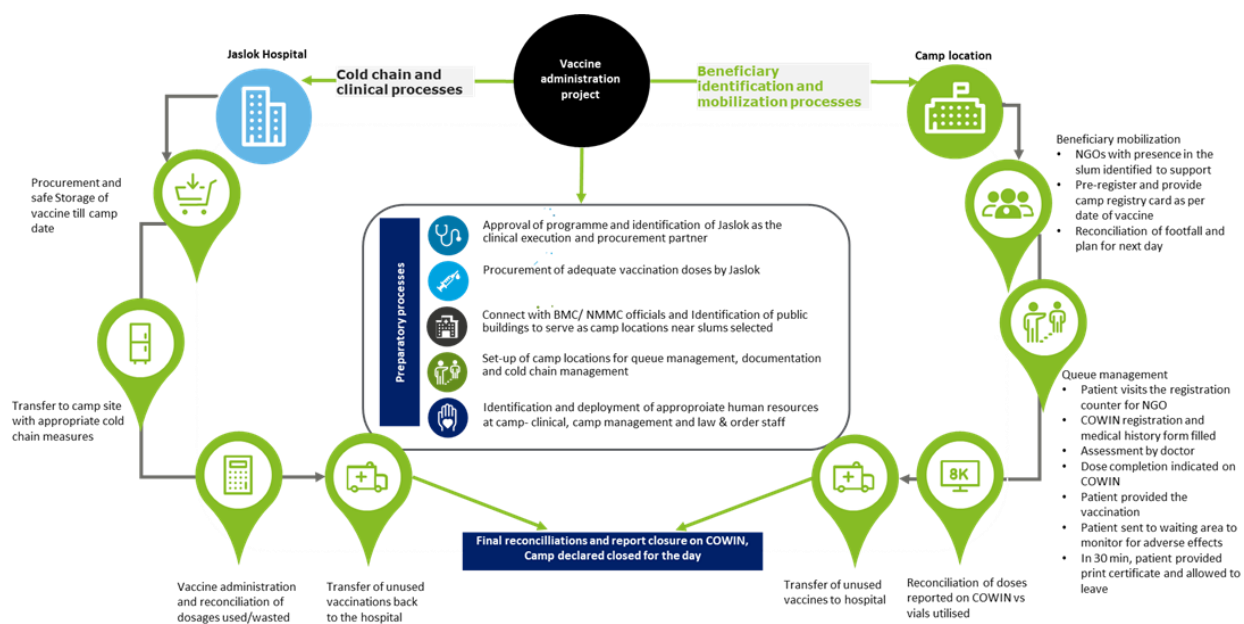
⁶ Source: Focusing on Vulnerable populations during COVID-19 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7363379/>)

⁷ Source: Process discussions with IP and Citi

- Procurement, testing, storage and delivery of Rations to distribution centre:
 - The contract for overall procurement, kit packaging and dispatch to delivery locations was given to Big Basket (Kolkata) and Kamat Hospitality (Karnataka). However, because of the quantum of the activity, local vendors were onboarded by both vendors to provide the selected items in bulk quantities.
 - The ration items were re-packaged and sealed packets created by hired contractual labourers in 2 shifts on high load days using an assembly line format
 - Quality checks were done before the transportation of final delivery assignments to the target locations. This quality testing was independently contracted to NAFARI.
- Distribution of ration
 - The beneficiary details were verified on software/ through token, and a picture of the beneficiary receiving the ration was uploaded on the app for record. In locations where delivery was unassisted by app, the token originally provided to beneficiary was collected back.

Vaccination administration model

The processes of the vaccination administration model were created in coordination with the BMC officials to facilitate compliance to the COWIN portal and vaccination record guidelines laid out by GOI.



Inputs

The handling of vaccine doses, camp management, and record of the vaccinations given to beneficiaries in the government-mandated portal COWIN along with the vaccine administration model was implemented through a number of partnerships. Jaslok Hospital obtained and delivered the vaccinations. The vendor for camp management and logistics mapping process, helped the execution across locations. To avoid crowding and long waits at the vaccination facility, a number of local groups, including SNEHA, SHED, Magic Bus, and others, assisted in the identification and mobilisation of beneficiaries through a methodical approach.

Process⁸

The vaccination programme was executed through a process created in coordination with BMC officials to make the dose management and the compliance to the vaccine protocols simpler. The process could be divided as beneficiary mobilization, camp and queue management, and vaccination record and cold chain process.

Beneficiary mobilization:

- On ground NGOs operating in slums leveraged their community connects to mobilize people for vaccination. Home-to-home visits conducted to pre-register beneficiaries
- BMC Urban Health post officials maintained daily records of vaccines administered every evening
- Camp and queue management:
 - NGO officials/volunteers assisted the beneficiaries to different counters
 - COWIN registration of beneficiaries completed
 - Beneficiaries administered vaccine dose based on the process identified at the location
 - Beneficiaries allowed to leave the camp post 30-minute observation period
- Vaccine record and cold chain management:
 - Number of doses administered are recorded in the software at the end of every day
 - Unused doses are transported to Jaslok hospital for hospital inward record and closure
 - The cold chain is maintained through a robust system of Ice Lined refrigerators (ILRs) at the hospital, a storage box with ice packs and a temperature-controlled fridge at the vaccination centre (for the long duration camp at Dharavi).

Strategic differentiators



Carried out in complete coordination and tandem with the BMC mandates in vaccine management (vaccine program)



Focused approach, developed leveraging capacities for all delivery players



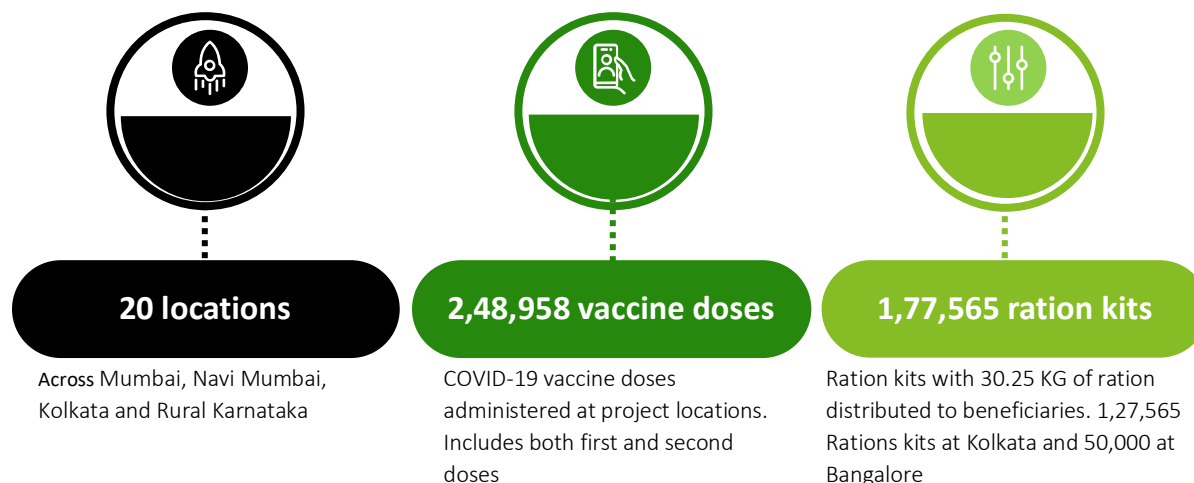
Leveraged existing government portals and documents for beneficiary verification and provision record



Multiple vendor partnerships created for appropriate delivery at all locations

⁸ Source: Process discussions with IP and Citi

Impact findings



Impact Created

The Citi funded COVID-19 relief projects reached out to persons belonging to lower income groups through provision of ration supplies and vaccines. **The overall programme provided 1,77,565 ration kits and 2,48,958 vaccination doses through the COVID-19 relief initiative.** The record of impact for the project is as mentioned below:

Ration support

Access to variety of and quality food items

- The ration kits provided plenty of variety in the meals of the beneficiaries as they were provided 2-3 different types of pulses, rice, flour, 1-2 types of millets, spices, and condiments, which could be leveraged to make several nutritious meals.
- **95% of the beneficiaries confirmed that the ration quality was much better than what they could otherwise afford.**
- **The ration kits were sufficient for households with less than or equal to households with 5 family members and lasted about one month.**
- Most beneficiaries reported that the rations should ideally have been provided at an earlier point of time (closer to the COVID-19 lockdowns and related crises), however, all beneficiaries reported that the rations were of help despite the delay in disbursement.

Access to nutritious food items

- **100% of the sample respondents agreed that having access to rations had reduced their insecurity related to access and availability of food sources.**
- **100% of the sample's respondents confirmed that the money saved by receiving the rations, the families could purchase other nutrient-dense foods such vegetables, milk, meat, and fish.**
- **100% of the beneficiaries reported that they were able to better feed their families—especially the children—thanks to the rations that were given to them.**
- **Of the women surveyed, 70% said they used rationed foods like pulses in at least one meal per day, and 55% said they used them for both lunch and dinner.**

Miscellaneous social impact

- More than 95% of the beneficiaries reported that COVID-19 and the associated lockdowns had a detrimental influence on their families' ability to generate money and their opportunities.
- **Majority of recipients stated that even two years after the first lockdown, they had not been able to overcome setbacks. As a result, the ration kits were a much-needed assistance.** However, respondents also reported that this relief was largely temporary, as they were aware that the rations support would not be available to them in near future.
- The ration project had **an indirect impact on the education of the children of beneficiaries as 80% of the beneficiaries confirmed that they were able to spend the saved money from ration on books, tuitions, and school uniforms for them.**
- The project also enabled better healthcare for beneficiaries as money saved from ration kits was utilized in medicine and treatment of the family members by 22% of the beneficiaries

Vaccine support

Access to COVID-19 vaccination

- **100% of the sample respondents mentioned that they were able to access vaccinations without any barriers due to the process set up by the vaccination camps.**
- The beneficiaries at the camp received the vaccinations obtained through Jaslok at a period when the government bodies lacked sufficient access to vaccinations.
- **The NGOs that supported the vaccination effort engaged in campaigns to increase public knowledge of the vaccine.** Additionally, they used a token system to mobilise the beneficiaries to guarantee shorter wait times and, as a result, lower the obstacles to accessing the COVID-19 immunisation.
- By positioning the vaccination camp in the centre of the neighbourhood, where members of the public felt at ease visiting, the problem of distance was overcome.

Increased trust in vaccination process

- Despite initial reluctance of the beneficiaries to visit the centre due to doubts over time taken for the process and misconceptions about side effects of vaccine, **the vaccination picked up as the site was well managed and beneficiaries got vaccinated without any issues**
- The program's staff took extra care to avoid any instances of political allegiance or posturing and operated as an unbiased community assistance organisation. Additionally, this lessened conflicts and misunderstandings about populations being specifically vaccinated.

Economic impact

- **Vaccination of the beneficiaries enabled them to access certain workplaces where vaccine was made mandatory for return to work.** Vaccination of such beneficiaries enabled them to return to work and avoid loss of wages
- The availability of vaccinations at the community impacted the return to work for several beneficiaries. **Nearly 100% of the beneficiaries who were in structured employment indicated that the provision of vaccinations allowed them to return to work.**
- Those involved in unstructured employments like delivery services, carpentry, household work etc also were able to return to work without fear of complex illnesses related to COVID-19, hence leading to economic stability.

Reduction in Community level COVID-19 vulnerability

- **The mass vaccination campaign ensured that the symptoms (cough, fever, cold, etc.) that cause droplet infection were highly limited, thereby reducing the spread of the virus among those at risk.**
- The availability of vaccinations has an impact on the severity of illnesses and the possibility for viral transmission among people. In addition, **the community had much better coverage compared to the rest of the city, reducing any spread among people involved in jobs/occupations outside the community as well.**

- The conversations with the various doctors working in the local communities also revealed that the vaccinations supported in lowering cases of COVID-19 or comparable illnesses (undetected due to a lack of testing or false negative results) were extremely limited within 6 weeks of the start of the vaccination drive.
- According to the discussions with medical practitioners, the percentage of walk-in patients at hospitals and checkpoints who were very ill after contracting COVID-19 was less than 0.5%.

Expansion of City level vaccination coverage

- The support to carrying out vaccinations in large numbers in slum pockets of the city really ensured that the population at risk and those vulnerable are adequately covered.
- This also led to word-of-mouth among similar religious and socio-economic groups regarding safety of the vaccine and hence improved uptake of vaccine over time.

Recommendations and way forward

- The model of support in the COVID-19 relief programme was related to provision of rations and vaccinations within communities at-risk of vulnerable to economic distress due to COVID-19. As the ration-vaccine combined support model organically developed in response to the various needs rather than as a cumulative support programme, there was room left for consolidation and hence better impact across fewer communities.
- The programme supported vaccination in Dharavi and other regions of Mumbai, however, the rations were supported in Kolkata and Bangalore. While this approach allowed for expanded reach across over 3,00,000+ unique individuals, the overall impact in a region was difficult to attribute to the programme.
- The digitisation model deployed in the ration programme helped avoid duplications across beneficiaries and possible pilferages. The model, however, may have caused exclusion of those persons who were extremely vulnerable but not in possession of appropriate documentation.
- The processes developed subsequently to support registration of recommended persons without documentation allowed for reduction in this exclusion. It is recommended that further development of this digitisation software continues to include this module.



Citi Social Innovation Lab

Start-up incubation program implemented by the Indian Institute of Technology, Kanpur

A low-cost, high energy-efficiency cold storage working on solar panels and thermal batteries to preserve low-value daily-use fruits and vegetables, operationalised by Temperate Technologies under the CBNA grant

Indian Institute of Technology- Citi Social Innovation Lab Introduction⁹



Overview: IIT-K received a grant from CBNA for an incubator programme to mentor 25 social entrepreneurs. Startup Incubation & Innovation Centre (SIIC) of IIT-K was responsible for implementing the programme, wherein the expected outcomes were as follows:

- **Mentor about 10 early-stage start-ups** from the AgriTech and MedTech sector
- **Run an 8-week 'Accelerator' program** for around 5 startups (across AgriTech, FinTech and MedTech sectors) demonstrating high social impact potential
- **Grant-management support for T-Hub** incubating around 10-15 start-ups in FinTech sector



Grant amount: INR 4,62,10,000

Project period: Jan 2021 to Dec 2021, with no cost extension up to Jun 2022

Location: All India



Problem Statement: Startups in India are defined as entities not exceeding five years from date of incorporation/ registration or having turnover (as per Companies Act, 2013) not more than INR 25 Crores during any of its first five years. Early-stage startups require support in translating their cutting-edge innovations into viable business models, by developing a product or service offering along with access to key markets, seed funding and investor groups.

SIIC was setup in IIT-K with a charter of incubating start-ups by supporting them with the eminent institute's network of academia, industry, and investors. Its key mandate is to support start-ups in providing cutting-edge innovative solutions to the underserved communities, thus creating social impact.

SDG alignment:



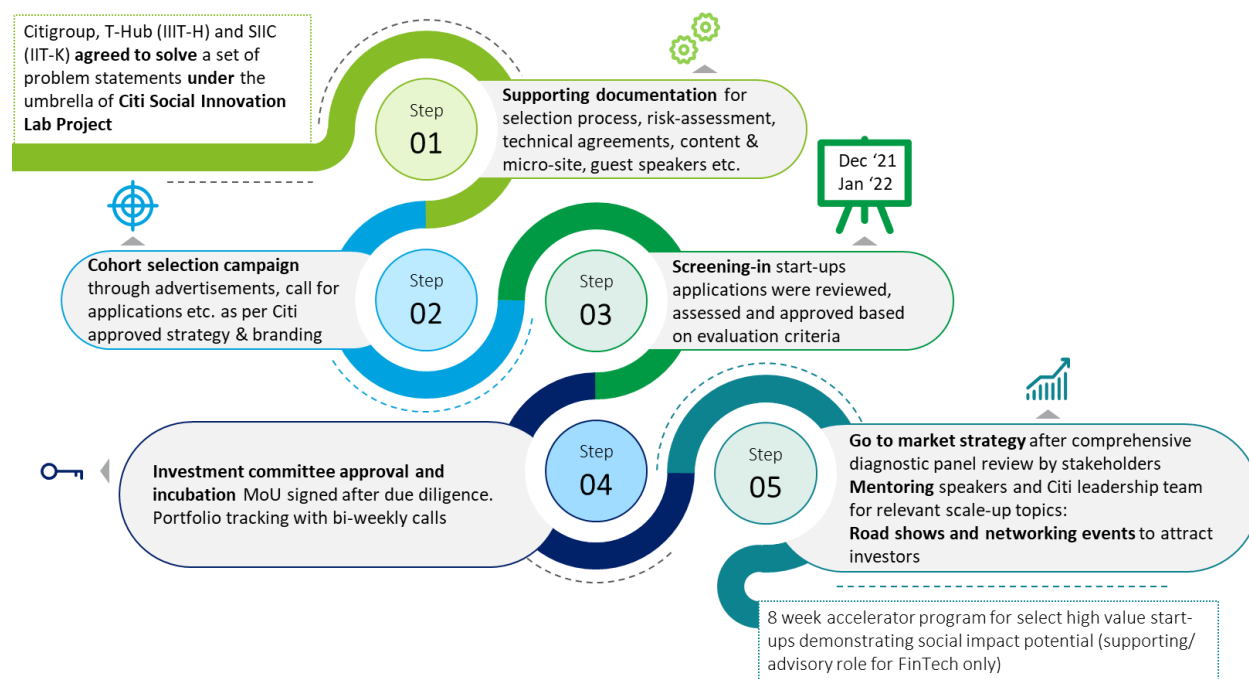
⁹ CITI Social Innovation Lab application form, submitted to CBNA by Indian Institute of Technology, Kanpur

⁹ Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, Gazette of India Notification dated 17 Feb 2016

⁹ "Promoting entrepreneurship and innovation by converting ideas into products", siicincubator.com

Project model

CBNA's Citi Social Innovation Lab initiative created a partnership between IIT Kanpur and T-Hub Hyderabad, and supported start-up seed grant investments in MedTech, AgriTech and FinTech sectors. All the MedTech and AgriTech start-ups reported directly to IIT-Kanpur, the FinTech start-ups specifically were reporting to T-Hub with IIT Kanpur's role being restricted to grant administration only. Additionally, select innovations demonstrating high social impact potential were additionally offered an accelerator mentorship program. The initiative implementation had five distinct phases, as illustrated below.



Inputs

After the cohort-selection process and grant-disbursement, IIT Kanpur engaged the start-ups through sector-specific mentoring sessions and networking events. The AgriTech, MedTech and FinTech start-ups received INR 10 lakhs each. The promising growth-stage startups under the Accelerator programme received INR 20 lakhs per start-up

Process

The "Citi Social Innovation Lab project plan document" outlined the entire process map. This was designed by technical partners (IIT, SIL) who provided selection criteria and funding, and T-Hub that provided implementation phase process.

- 78 Fintech, 136 AgriTech start-ups and 114 MedTech startups applied to Citi Social Innovation Lab incubation programme. They were shortlisted by a 6+ member Internal Evaluation Committee (IEC) and then recommended to the External Evaluation Committee (EEC) comprising of 5-7 Citi experts.
- 29 start-ups were finalized jointly for the award and incubation program.
- The scoring methodology deployed by IEC and EEC consisted of 20-point score card¹⁰, and a 24-point score card¹¹ which evaluated various parameters.

¹⁰ Minutes of the meeting of the Internal committee for the CITI Social Innovation Lab held on 25th & 27th December 2021, as shared by IIT Kanpur

¹¹ External Evaluation Committee -Summary for EEC Meetings organized between 4-12 January 2022 for FinTech (Accelerator), as shared by IIT Kanpur

Strategic differentiators



Strong **mentorship** by subject matter experts and industry leaders from the sector



Strong **brand association** amongst leading institutions and Citi enabled a good public relations opportunity that was utilised by Start-ups to project their solutions



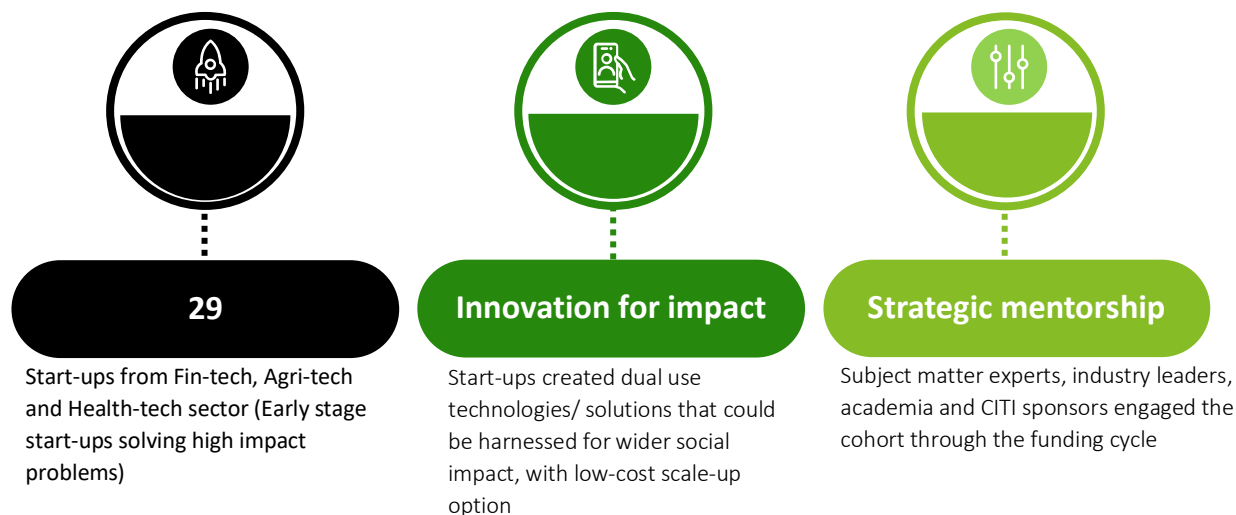
CBNA grant sponsored product testing, user-trials and commercialization of existing solutions that required specific funding support to enable scale-up



Start-ups were able to demonstrate prototypes/ solution refinements **within short time**

Impact findings

The program provided the much-needed mentorship support and research grants that enabled start-ups in refining their products, value propositions and go-to-market strategies, while enhancing visibility in the sector.



Impact Created

Three start-ups out of ten were sampled for the impact assessment. They reported that they opted into the programme due to factors like market presence/visibility, mentorship, brand, networking opportunities and product alignment. Some start-ups also reported need for funding and sponsorship as motivation.

Innovation and product development through program support

- IITK engaged with innovators to provide solution development, suggestions on quality enhancement and reviewed progress of prototype development.
- Problem solving: The social problem statements being solved by the innovators formed an important selection criterion at both the IEC and EEC review stages. The panels looked for unique aspects, market-viability of proposed solution and ability of the start-up to deliver results. The mentorship offered to start-ups offered to solve for these issues.
- Some issues described by start-ups that were resolved with mentorship were- Technology processes (Technology documentation, Tech deployment), team building, Branding and marketing (market campaign and surveys, brand partnerships, social media marketing, customer acquisition) and product development (research and validation, user testing).
- Majority (>80%) start-ups demonstrated working prototypes, facilities, Apps, websites, and solutions within a month of grant disbursal. The timely grant played a supporting role in fast tracking product/ solutions development

Early brand association and visibility

- For early-stage start-ups to be able to receive additional funding or investment cycles, they must be visible and have a market presence within the first five years. These start-ups gained respect from their affiliation with Citi Social Innovation Lab since they were extensively examined and authorised by a reputable company and a select group of professionals.
- The start-ups were able to employ committed talent thanks to the short-term finance of INR 10–20 lakhs, review their entire strategy in light of mentor comments, and then plan for market eminence initiatives through network expansion activities/events.
- Through one-on-one meetings, peer gatherings, and introductions to their own networks, the SIL mentors offered direction and support throughout.

Impact on solution/product development

- **Scalability potential:** The start-ups were able to expedite solution development through exposure to cutting edge technology (within and beyond the cohort). The insights gained from the mentorship also affected the product development approach. It was reported that their future scale up could be due to organizational sustainability, competitive advantage, technology, patents/copyrights and product development assets.

Grant relevance and future pathway

- Most respondents gave the awarding process and onboarding simplicity "Excellent" ratings. The stringent selection procedure and evaluation standards were thought to have the ability to provide a compelling product or solution for the sector's large-scale problem statement.
- Despite the fact that the start-ups valued the mentoring and grant support programmes, the respondents thought there was need for more networking opportunities and ways to increase brand recognition.

Recommendations and way forward

- Citi Social Innovation lab should consider the opportunity of funding select high-social impact projects within current cohort for another round of funding to accelerate product/solutions development.
- Inherent opportunity to spotlight the achievements of each start-up within the ongoing public relations processes. Government establishments like PTI and other media agencies who have been engaged during the programme, can further propagate the achievements to enhance visibility of the outcomes achieved
- All the start-ups under the SIL umbrella can be treated as alumni and formed up as a peer-support group. This group can thereafter meet during monthly online events that can be hosted by Citi and get invited for select events to enhance the opportunities for funding, product development and networking
- Citi can explore long term intellectual property rights creation using MoU pathway with the SIL Alumni group. Royalties or income stream generated can be channelized for further incubation or acceleration cycles

Stories from the field

66
99

"I found the program very useful. I am very pleased with the way mentoring sessions were hosted. I feel that we could discuss work related issues with our mentor who guided the organization on next steps. Overall, the sessions were very inspiring and uplifting - my mentor inspired me with the way he managed the first session. He enabled me as a founder to identify our USP through participatory discussions. Mentorship was of direct value to me, as well as to my startup."

– Mr. Akshay Kawale, Founder,
AgrowSure Products and Innovations Pvt Ltd

66
99

"This is a very good programme. I especially liked the overall focus created by mentors who asked difficult questions to enable us with marketing strategy. Getting the product to market by analysing the right fit for the product was a key learning."

– Ms. Kanika Bansal, Director,
Designocare Solutions Pvt Ltd

Life & Limb Pvt Ltd

MedTech Sector:



BIONICLI® is a 3D printed, battery operated, light weight prosthetic upper arm with 14 adaptive grip patterns. The arm can fit different amputee-stumps since the battery is in the palm. The project commenced at IIT Kanpur during the MS-degree research project of the start-up's Founder. Mr. Nishant Agarwal went on to complete his studies with a gold-medal for his pioneering research between Dec 2015 - Jul 2018. His supervisor, Dr. Neeraj Sinha was closely involved during the research thesis and subsequent product R&D between 2018-2020.

Mr. Agarwal continued to hire professionals and R&D for BIONICLI. At the time of SIL-applications for CBNA grant, there were a few components that

required further R&D. The INR 10 Lakhs grant helped them develop BIONICLI 2.0 with one successful product trial cycle. Their SIL mentor Mr. Sanjay Banerjee guided them through the development process and later advised them to seek Impact Investors for scale-up, since VCs would not be interested in funding a niche product wherein social impact could only be created through donations to most needy/ low-income groups who could not afford expensive prostheses.

July 2022 status: a set of BIONICLI 2.0 will be delivered to a group of upper-arm amputees listed with an undisclosed District Rehabilitation Centre (DRC) near Mumbai by the second week of July 2022. It is expected to garner media attention and all stakeholders will be informed about the schedule, closer to programme date. From 7 June, there is an ongoing hiring for additional engineers. On 9 July 2022, the start-up was declared winner of TIDE Scaleup grant during Digital India Week 2022 and National Start-up Conference held in Gandhinagar, Gujarat where the Hon. Prime Minister was present. The start-up is also amongst the Top-5 finalists for Cornell Mark Mobius EMI pitch competition, 2022 with results awaited.

Temperate Technologies Pvt Ltd

AgriTech Sector:



Temperate Technologies works towards integrating low-cost cold-storage solutions in the farm-to-fork supply chain. As part of CBNA grant, a small, decentralized, solar-powered cold room was created in Mominpet village, Vikarabad district of Telangana for an all-women owned farmer producer organisation. Temperate Technologies developed a proprietary energy-efficient cooling technology based on dew point cooling

technology that consumes around 40-80% less energy than traditional refrigeration-based solutions. This method was suitable for off-grid solar-powered installations in a farm-based setting where regular electricity connections may not be accessible.

These low-cost, low-input systems enable storage of low value fruits and vegetables, that prevent seed-loss and delay perish-rate of a low-income farmer's produce. It is expected that longer durability of agri-produce would enable increased income sources through survivability of fresh food over a longer gestation period.

July 2022 status: The start-up is in the process of launching a marketable product (see 2 versions in image) that will be portable and easy to install. It is expected to transform farm-produce and farm-livelihoods especially for low-income farmers. The start-up is planning on working with farmer producer organisations.



Research grants to 6 start-ups

A COVID-19 focused incubation program implemented by the Indian Institute of Science, Bengaluru

Repurposed long-range, large-payload drones for spraying disinfectants to tackle spread of COVID-19. Additional applications for survey, crowd control and public management by installing camera with PA system, Source: General Aeronautic Pvt Ltd, a grantee of CBNA

Indian Institute of science- COVID-19 solutions through support to 6 start-ups

Introduction^{12,13}



Overview: CBNA provided grants to the Society for innovation and development (SID), Indian Institute of Science, Bengaluru six deep science projects, impacting capacities for response to COVID-19 situation. The start-ups that were funded by CBNA were:

- Mynvax coronavirus vaccine- for healthcare workers and elderly at high-risk
- General aeronautics' multi-purpose drones- large payload drone for spraying disinfectants and crown control
- Azooka life sciences- diagnostic test for COVID-19
- ShanMukha innovations portable labs- portable RT-PCR machine to be installed in vans
- AI Health highway's pre-screening tool- web-based application to reduce burden on health care service providers, while assisting companies in screening employees and remote clinical monitoring
- MicroX Labs' Point of care device – detecting inflammation in asymptomatic patients to prevent them from spreading Covid infection while being undiagnosed carriers



Grant amount: INR 5, 00,00,000

Project period: July 2020 to July 2021

Location: Karnataka



Problem Statement: Startups (entities <5 years since incorporation/ registration or having turnover [as per Companies Act, 2013] not more than INR 25 Crores during any of its first five years). Deep-science startups face challenges in accessing funding for their core-academic scientific research and in translating research outcomes into viable business solutions. SID at IISc supports the start-ups in converting their scientific research initiatives into viable products and solutions and providing access to markets and capital. The centre sought to facilitate deep science startups by leveraging technology for building smart and economically viable solutions that accelerate social impact. During the Covid lockdown(s) the startups required access to research labs since they were involved in non-software, lab-based, specialized machines/ equipment-centric, Covid related expensive research wherein work-from-home configuration was impossible.



SDG alignment:



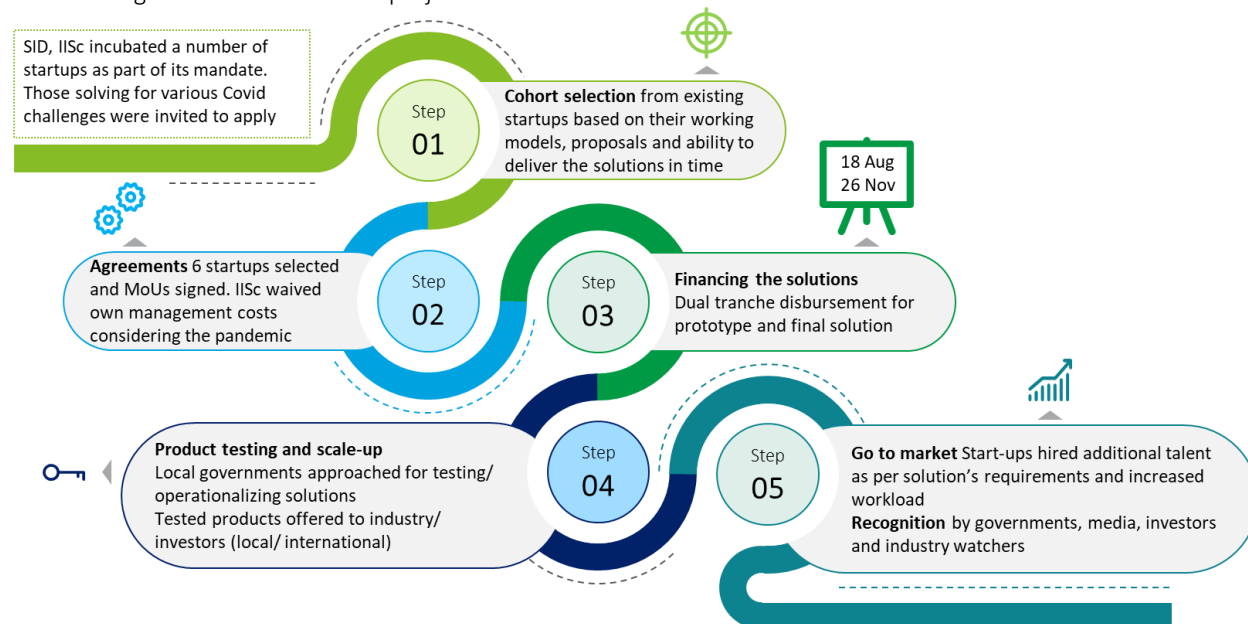
¹² Sources: Project MOUs FY 20-21, 21-22

¹³ Problem statement sources: 1) Department of Industrial Policy and Promotion, Ministry of Commerce & Industry, Gazette of India Notification dated 17 Feb 2016; 2) Shraddha Goled, "Early funding remains a challenge for deep tech startups: CS Murali, SID, IISc", 2022, analyticsindiamag.com; 3) "Social impact startups are on the rise in India", 2019, indbiz.gov.in; 4) Sudhir Chowdhary, "Deep Science startups require a longer gestation period – Here's why", financialexpress.com

Project model

The project supported start-ups that were already being incubated by IISc. The deep-science projects were provided critical funding for continuation of research and creation of prototypes. Investors tend to steer away from financing deep-science projects due to longer gestation, speculation around research outcomes, go-to-market utility and overall higher risk. In addition to speculation most investors tend to steer away from financing them. In addition, IISc boosted the CBNA grant by providing the innovators with access to R&D facilities, specialized machines, scientific libraries etc.

The five stages of the model of the project are described below:



Inputs

The project provisions the existing facilities at IISc, such as labs, libraries and conference rooms for the start-up R&D. In addition, weekly seminars and investor networking events are held, and alternative sources of funding beyond what is outlined in the MOU is also provided to them. In addition, guidance on execution is provided by IISc.

Process¹⁴

The selection programme of the SID incubates for the grant was based on an invitation to all onboarded incubates to provide solutions to the prevailing COVID-19 related problem statements. After a rigorous review process, six start-ups were pre-identified for the funding.

Based on the identification process, the Incubation Support Agreements (ISA) were drawn to outline the assets to be shared, allocation of schedules, documents, and relevant resources. Both parties, IISc and start-ups are aware of their rights, duties and responsibilities towards each other. The funding is provided to the start-ups as an achievement based dual-tranche funding (80%+20%) to SID-IISc. This ensured better quality control and adherence to timelines.

¹⁴ Source: Process discussions with IP and Citi

Strategic differentiators



Mentorship and facility access to **India's best science institution (NIRF Rank 1)** and global leader in the Citations per faculty (CpF)



Convergence of deep-science start-up's innovation with commercialization platform

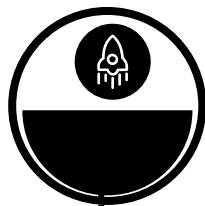


Unrestricted access to expensive assets – labs, machines, equipment etc. during the lockdown



Promising incubatees with a proven track record were supported through a rigorous evaluation process

Impact findings



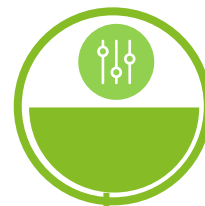
6 start-ups

6 startups- Mynvax, General aeronautics, Azzoka life science, Shanmukha innovations, AI health highway, MicroX Labs



6/6 start-ups

Start-ups that were able to solve for their problem statement



COVID-19 impact

Start-ups solved for screening, testing, sanitization and drug delivery challenges related to COVID 19

Impact Created

The CBNA funded start-ups reported having identified the problem statement clearly at the onset of the programme, hence there was 100% goal attainment. **All start-ups reported having successfully developed and tested prototypes. This positively impacted health of the people during the pandemic.**

Satisfaction with grant support

Ability to scale through grant association

- The **grant not only provided benefit for the deep science research outcomes, but it also provided support for organizational scale-up as well.** All start-ups were appreciative of the guidance on management for long term commercial viability.
- The **start-ups received market connects, product showcase/USP support, and support for market resilience.**
- **Start-ups attributed appropriate HR hiring (through funds), strategy guidance, market eminence, network expansion and increased net-worth to their success.**

Resolved problem statement

- **6/6 start-ups were able to create and test product prototypes.** The problem statements ranged from vaccine and drug deployment, sanitation, to screening and testing of COVID-19.
- The solutions developed were as follows:



Mynvax

Low cost vaccine for COVID-19 that can be stored at room temperature

General aeronautics

Modified spray nozzle fitted with large payload capacity drones for site disinfection and crowd control



Azooka life sciences

Low-cost replacement, for portable & affordable Covid testing using reagents that do not require cold storage



Shanmukha innovations

Develop a portable RT-PCR and install them in vans

AI Health highway

Self pre-screening tool, web based, to reduce burden on healthcare service providers, assisting companies in screening employees and enabling remote critical monitoring



MicroX labs

Point of care device- detecting inflammation in asymptomatic patients to prevent them from spreading COVID-19 infection as undiagnosed carriers

Prototype testing and go-to-market

- **All start-ups reported readiness for go-to-market, post-prototype stage or to seek regulator's approval by the end of the programme.**
- Azooka life sciences, developer of low-cost replacement for RT-PCR which was portable and affordable received a lot of media attention and investor queries.
- General aeronautics was able to enter scale-up negotiations with the government, and Mynvax was able to secure additional funding from Gol.

Impact on business model

- Start-ups reported high ability to scale in future, owing to organisational sustainability, competitive advantage, availability of technology, existing patents and new product developed.
- Additionally, **start-ups were able to leverage the visibility and guidance for their future impact on business strategy.**

Recommendations and way forward

- Need to streamline activities for branding and share success stories to a larger audience for startups to get more visibility, funding, and networking opportunities.
- The deep-science projects require continued investment not only in terms of grant disbursement, but also require introduction to VCs, institutional investors, and networks to enable faster translation of science research into commercially viable products. There is scope for CBNA to explore the social impact aspect of deep science where cutting-edge technology-based solutions were being used to serve wider demographic groups, especially in under-served communities.

Stories from the field

AI Health Highway India Pvt Ltd

A self pre-screening tool was developed using a web application for COVID-19 screening, assist patients in self-monitoring at home and remote clinical monitoring.

A Swiss Cheese Model (awareness) for promoting social distancing, wearing masks, washing hands, rapid testing in sequence considering gaps remain despite best of prevention methods and a Consultation Model for monitoring vitals, screening, surveillance, RAT test etc. was designed. The triage system created a fine balance between awareness and consultation, wherein the mild & moderate symptoms could be treated with home isolation using tele monitoring of vitals and the severe cases could be hospitalized.

The screenshot shows the official website of India Science, Technology & Innovation. The header includes the organization's name in Hindi and English, a search bar, and logos for the 75th anniversary of India's independence. The main navigation bar lists categories like Research, Funding, Organisations, Programmes & Schemes, Fellowships & Scholarships, and Technologies. The 'Technologies' section is active, displaying a list of various scientific fields on the left. The 'Computer Sciences and IT' category is selected, leading to a detailed page for the 'Pre-screening and triage tool for COVID-19'. This page provides metadata such as the title, area, sub-area, focus area, developing agency (AI Highway, SID, Bengaluru), technology readiness index, email, and website link. A brief description at the bottom explains that the tool is a pre-screening and triage tool (beta stage) for COVID-19 to help self-monitoring and patients-at-home isolation, aiming to reduce the burden on clinics and hospitals.

Nurses led triage for Covid Screening of 7500+ patients, Doctors led 5000+ tele consulting and 44.53% of screened population needed NCD's intervention impacting 5000+ families. SOPs were introduced to ensure medication and compliance follow up through automated alerts/ prompts. These processes prevented unnecessary hospitalisation and identified NCDs in target population.

Status as reported by media in 2022: links hosted on Govt of India website as part of technologies for Covid response



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