



# Executive Summary

## Promoting Stem Education and Healthy Living among Children

Impact Assessment Report | FY 2022-23

Conducted in March 2025

# Executive Summary

Abbott's India Ltd<sup>1</sup>CSR initiatives align with global goals, focusing on sustainable community development, healthcare access, and environmental stewardship. Through innovative solutions, awareness campaigns, and partnerships, Abbott addresses key health issues like maternity care, diabetes, and malnutrition.

## About the program

The Abbott's India Ltd CSR Team, in collaboration with Smile Foundation<sup>2</sup> through project STEM labs and Healthy Living in Maharashtra, is driving a transformative initiative aimed at enhancing STEM education, fostering sports participation and promoting healthy living among school children across **14 schools** in Mumbai, Palghar, and Thane, Maharashtra. This intervention, targeting **4,600 students**, focuses on equipping young learners with essential skills and knowledge to prepare them for future challenges while ensuring their holistic development at the same time.

**Purpose and Scope of Evaluation** CSRBOX conducted an impact assessment for the "Promoting STEM Education and Healthy Living Among Children" programme to analyse the impact and assess the outcome of the project for the year **2022-23**.

The activities of the programme are as follows: -

- 1 •To establish the STEM labs in the school
- 2 •Teacher Training & Pedagogy
- 3 •Awareness about Menstrual Hygiene and Nutrition
- 4 •Sports (indoor and outdoor), yoga and meditation
- 5 •Awareness about NCDs, basics Health and Hygiene

<sup>1</sup> <https://www.abbott.co.in/investor-relations/corporate-social-responsibility/csr-policy.html>

<sup>2</sup> <https://www.smilefoundationindia.org/>

## Key Findings

This section entails findings as guided by the OECD – DAC framework for evaluating development outcomes.

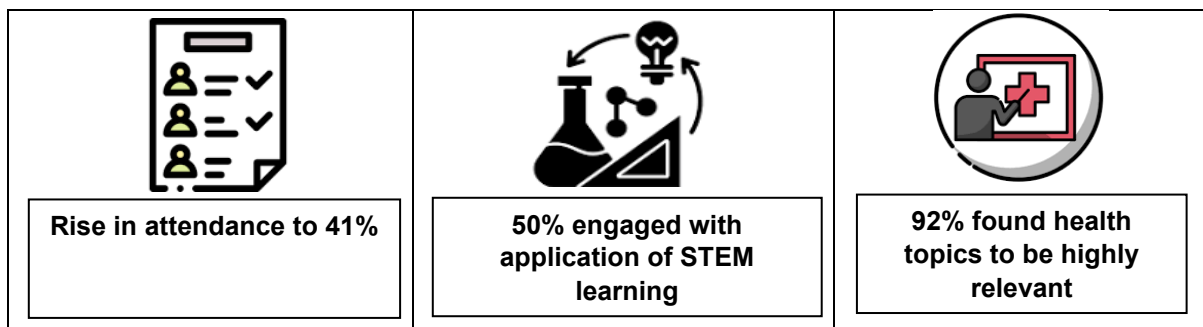
### Socio – Demographic Profile

With 52% of students being female and 48% being male, the program reached a gender-balanced cohort, encouraging inclusive participation. Most students **(77%) are between the ages of 14 and 16**, an ideal age group for getting introduced to STEM and life skills. The **88% of students are in grades 8–10**, which is a crucial time for deciding on academic and future professional paths to be pursued.

The majority of students come from low-income families, where **30% of fathers are skilled labourers and 88% of mothers are housemakers**. These socioeconomic circumstances highlight the program's value in closing disparities in aspiration and education. With an intent to promote the holistic development of adolescents, the intervention placed a high priority on menstrual hygiene and healthy living.

### Relevance (*extent to which intervention objectives and design responds to beneficiary needs*)

By directly addressing the fundamental gaps in underprivileged adolescents' exposure to STEM and health awareness issues, the program demonstrated strong relevance. The majority of schools lacked functional scientific labs before the intervention, especially ones with mathematical equipment to facilitate experiential learning. Earlier, the majority of the teaching methodology was textbook-driven, which limited opportunities for participation and practical comprehension. Students were not exposed to the practical approach of applying scientific or mathematical ideas in the actual conditions.



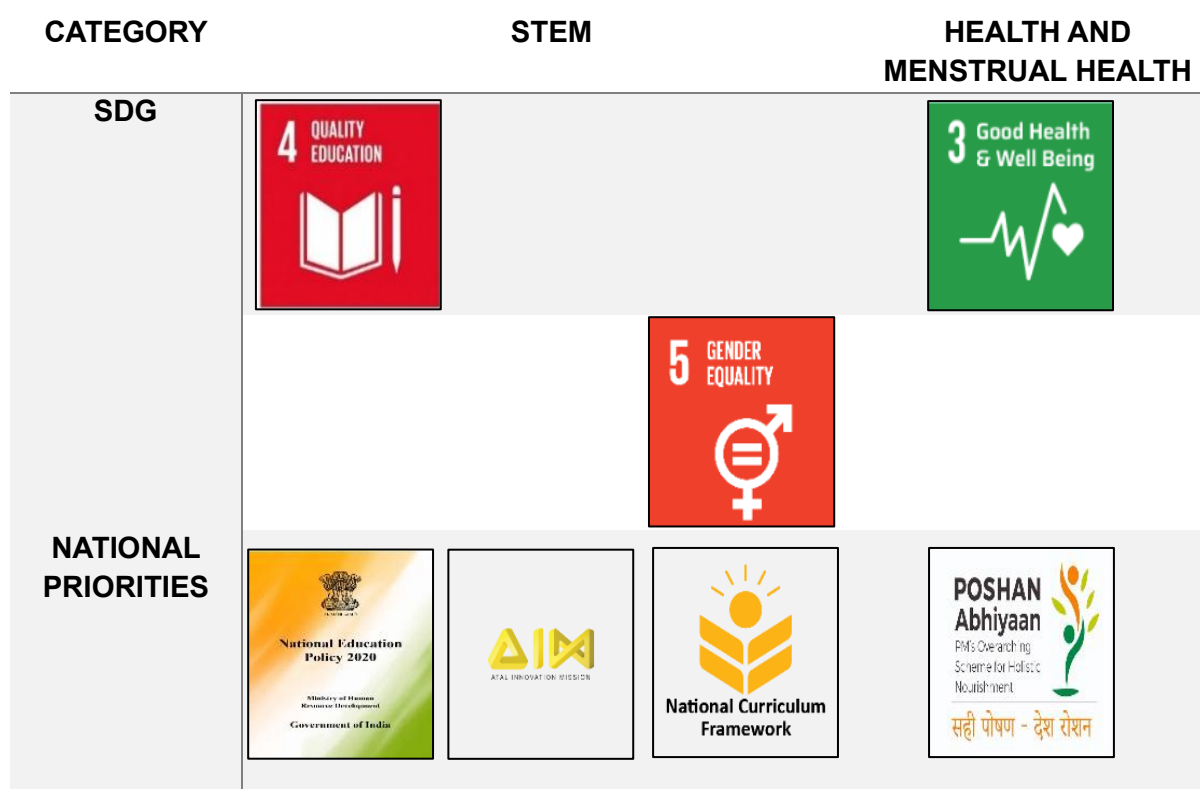
Only 37% of students knew about robots and only 36% had ever coded before the intervention, suggesting that students had little exposure to digital learning resources. This demonstrated a notable deficiency in both practical expertise with emerging technology and digital literacy. By effectively introducing resource access and planned sessions, the intervention improved digital engagement.

With respect to the health intervention, it is essential to mention here that **prior to the initiative, 39% of girls did not have access to sanitary napkins, making menstruation hygiene a major health concern**. This deficiency brought to light cultural taboos and a lack of understanding in addition to infrastructure constraints. Better access to sanitary products and targeted awareness campaigns were two ways the program addressed these issues. Consequently, there were improvements in menstrual health knowledge and digital involvement.

**Coherence (compatibility of the intervention with other interventions in a country, sector or institution)**

The programme demonstrates strong coherence by aligning its goals with broader national priorities and international goals (Sustainable Development Goals). **SDG 4** (Quality Education) through STEM-based learning, **SDG 5** (Gender Equality) by providing girls with leadership opportunities and health knowledge, and **SDG 3** (Good Health and Well-Being) by encouraging menstrual hygiene and wholesome meals.

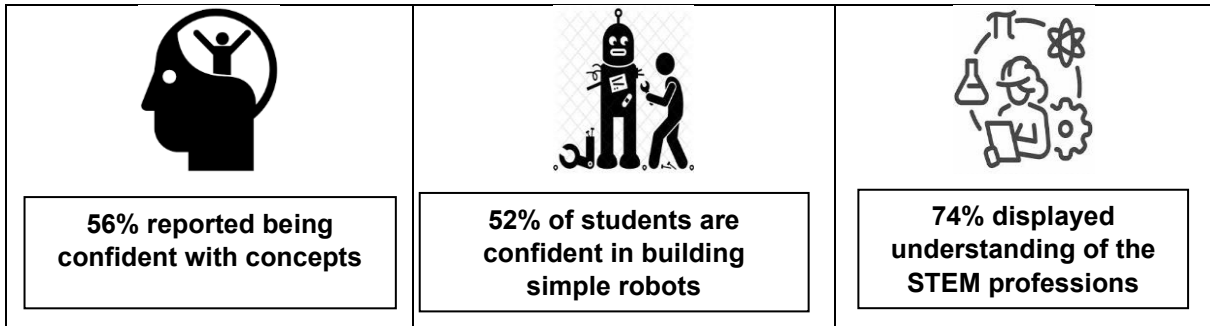
Additionally, by promoting healthy eating habits among school children, it integrates with the spirit of **POSHAN Abhiyaan** i.e., PM's Overarching Scheme for Holistic Nourishment. It is a mission with the vision to ensure attainment of malnutrition free India by 2022. The objective of POSHAN Abhiyaan to reduce stunting in identified Districts of India with the highest malnutrition burden by improving utilization of key Anganwadi Services and improving the quality of Anganwadi Services delivery<sup>3</sup>. Further aligning with the **National Education Policy 2020** through digital integration and experiential learning.



**Effectiveness (extent to which intervention objectives and design responds to beneficiary needs)**

Effectiveness was evident in how the level of confidence and applied understanding of the concepts evolved among students. Before the STEM engagement, it was seen that the majority of students struggled to grasp the concepts pertaining to science and technology.

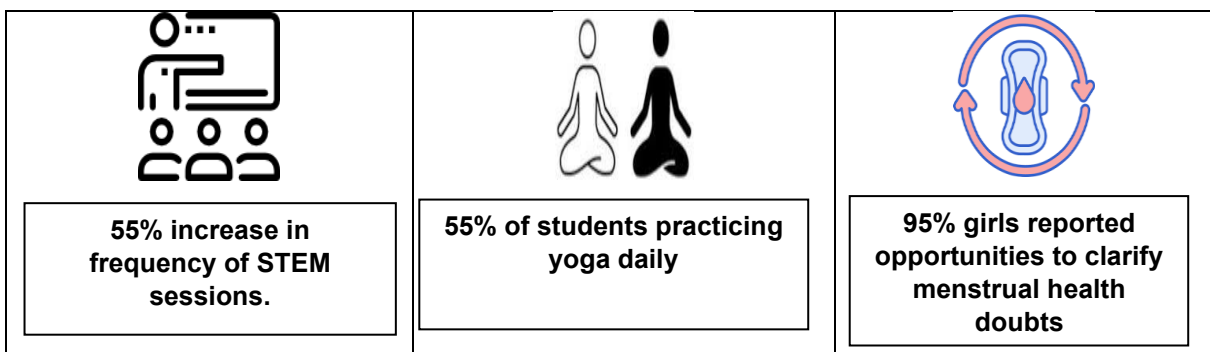
<sup>3</sup> <https://www.india.gov.in/spotlight/poshan-abhiyaan-pms-overarching-scheme-holistic-nourishment>



The **67% of students are now able to analyse the science problems independently and application of multi-step logic (52%)** by breaking the problem into simpler steps. This indicates a shift from rote-learning to problem-solving approach. Meanwhile, **69% now feel confident in explaining science concepts** whereas earlier a majority may have hesitated or lacked conceptual clarity. Physical and mental being also saw noticeable changes.

***Efficiency (extent to which the intervention delivers, and how well resources were)***

As for efficiency, the programme has institutionalised changes that are now embedded in the ecosystem of the school. **Dedicated timetables for STEM, was reported by 84% of the students**, reflecting that what earlier was an ad-hoc activity has now become a part of the structured classroom teaching. Additionally, **70% of the students now have access to necessary learning tools, thereby** confirming significant resource availability, compared to earlier scenarios where students and teachers managed with basic or no lab equipment(s).

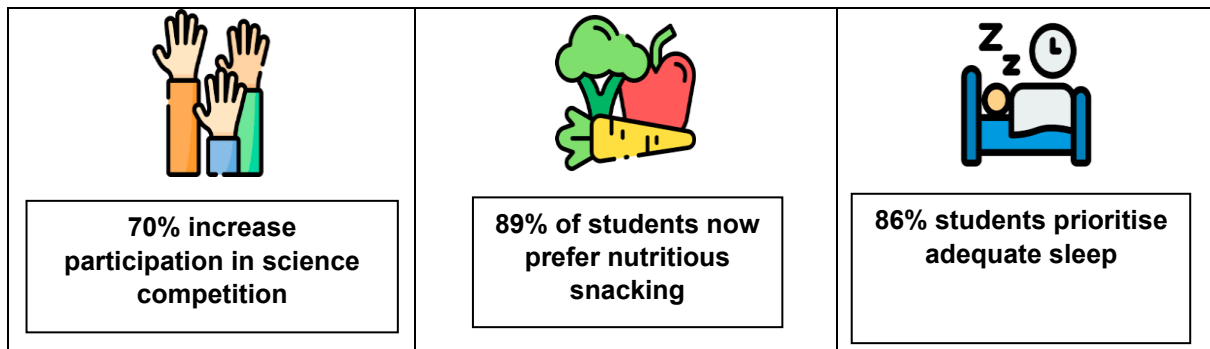


Additionally, **91% of the girls confirmed that they found visuals and examples easy to understand, implying an improvement in quality of the instructions.** This provides insights on not only the reach but also the responsiveness of the intervention tailored to the learners' needs. These improvements collectively highlight that resources are being optimally utilised, leading to better learning experiences.

***Impact (extent to which intervention has generated significant positive or negative, intended or unintended, higher – level effects)***

Moving on to the impact of the intervention, the program has been shown to have an impact on aspirations and behaviours of the students. The majority of students probably had little exposure to STEM outside of textbooks prior to the intervention, with no involvement or hands-on application. Their enthusiasm for pursuing STEM courses may have been further stifled by the absence of relatable role models and engaging resources. Students' curiosity and initiative have grown as a result of organized activities and peer-led involvement. Many now exhibit increased self-assurance while using STEM ideas in practical settings. Their long-term

academic and professional goals have also clearly changed. It can be inferred that the curriculum has been successful in fostering in a culture of curiosity, investigation, and aspiration among the students.



This is reflected from the fact that **60% now engage in STEM projects** such as making of models and coding. Additionally, **73% reported increased interest in science – related careers, fostering enthusiasm about STEM.** Confidence in robotics (63%) and independent experiment skills (50%) highlighted the transformation in students’ technical fluency and self – reliance.

The impact with respect to health-related component of the intervention, the hydration levels have improved, with **65% now drinking six or more glasses of water daily.** Cognitive performance, linked to sports, saw a boost with 76% noting better focus – denoting on how physical activity contributes meaningfully to learning outcomes. A significant shift was seen in menstrual hygiene too as post – program **89% of the girls are now able to manage their periods independently,** drawing a contrast independence or confusion before the intervention.

***Sustainability (extent to which net benefits of the intervention are likely to continue)***

Sustainability outcomes indicate promising long – term retention of habits and ambitions. Prior to the intervention, career clarity and confidence in pursuing STEM has been low. Currently, **77% express a clear desire to pursue STEM career,** with top interest in engineering (43%) followed by medicine (43%), and IT (25%) – highlighting that the intervention not only built skills but provided them a road for career building. Further, living healthy is not a temporary shift and is clearly represented by 80% of the students maintaining healthy schedule on routine basis. 63% of the girls use reusable clothes or menstrual cups whenever available – a significant conscious shift towards hygiene behaviours.



There are still chances to expand the program's influence even though it has established a solid basis in a number of areas, including STEM education, nutrition, and health. By creating peer-led STEM clubs to increase confidence above the current 69%, including mathematical tools into labs to bridge the resource divide, and offering organized booklets that assist educators and students, this influence can be increased. Further igniting interest in STEM routes can be achieved by utilizing platforms such as scientific competitions and career seminars, which already engage 70% of the students.

The benefits of the intervention can be made both scalable and sustainable by addressing deficiencies in student participation, instructional support, and infrastructure through focused improvements. Strengthening and institutionalizing program outcomes across schools is the goal of the following important proposals.

### **Recommendations**

Building on the foundation that has been built by the program, the practical suggestions are meant to close current gaps and increase long-term effects.

<b>Sr No.</b>	<b>Category</b>	<b>Challenges</b>	<b>Recommendation</b>
1	Enhancing STEM Labs with Math Apparatus	The existing STEM labs are equipped with science related apparatus. However, mathematic tools are lacking.	To introduce math related apparatus such as geometry kits, abacuses and algebraic tiles. This will help to understand the concepts better by visualising them.
2	Providing Grade – Wise Experiment Booklets	The existing STEM labs have apparatus but they are lacking in structured, grade – wise booklets to support learning as well as teaching.	To provide simple, grade – specific experiments booklets that allow students to self – assess and document their progress. This will enable into structured as well as sustainable learning.
3	Sustaining Healthy Eating Habits	Although students show improved preferences for nutritious food, there is limited reinforcement of these habits in school environment on daily basis.	Initiative such as “healthy tiffin” competition can be organised once in a month with a view to help students continue with an aim to sustain the healthy habits promoted under the intervention.

Altogether, the programme demonstrates a well – aligned and impactful model of STEM and health education for students. As a result, it has created ripple effects on knowledge, behaviour, and mindset that are likely to be present beyond the lifecycle of the project.