

Rolls-Royce Community Investment in India

Background: For the Rolls-Royce Group, sustainability is inherent to our company strategy. Our vision is to deliver better power for a changing world. We will deliver better power for our customers, use innovation to secure a better future, and build on today's achievements to develop a better business, ready for the opportunities ahead.

At Rolls-Royce, we have set ourselves a global target to reach 25 million pioneers through #RollsRoyceSTEM by 2030 inspiring and enabling future generations.

We are committed to building positive relationships that contribute to the economic development and social wellbeing of communities where we operate. Community investment is an intrinsic part of the way we do business, supporting our business strategy and future success.

Our CSR initiatives in the region are built around this philosophy, wherein we intend to empower current and future generations. The common theme across our CI initiatives is to empower future generations – Empower them to learn; empower them to comprehend & empower them to think differently. Because when you dare to think outside the box – you innovate. And this is consistent across our initiatives in the region.

Programme: Rolls-Royce in India runs following key Programmes:

- (i) Muskaan¹ with CAF India; and
- (ii) Nirmaan² with Agastya International Foundation
- (iii) Tamana Education Series & Tamana Annual Fund Raiser with Tamana
- (iv) Unnati³ A scholarship Programme for Women Engineering Students with CAF India & Buddy4Study
- Unnati Skill Development Programme for Women with Centre of Excellence in Maritime & Shipbuilding (CEMS)
- (vi) Chevening Rolls-Royce Science & Innovation Fellowship (CRISP)
- (vii) 100 Million Minds

¹ Muskaan means "smile"

² Nirmaan means 'to build"

³ Unnati meand "prosperity" or "improvement"



MUSKAAN: In Nov'15, we started project "Muskaan" with CAF India as our flagship STEM initiative in India. The programme was rolled-out in Bengaluru, Delhi, Navi Mumbai & Pune, to establish the foundations of understanding of the need for STEM education among the students, especially for the underprivileged ones.

Muskaan is now active in 9 schools across India - seven Government schools in Bangalore and two in New Delhi. Through this, we reach out to ~2000 students & 50 teachers annually who are directly guided and encouraged to supplement their understanding of STEM concepts through special activities and learning tools. The programme contributes to enhanced learning among children through special activities using innovative learning tools, kits-based learning and other need based intervention.

During the execution of programmes, it was felt and expressed by the teachers that STEM education being such a technically enriched programme should benefit the entire middle school. Acting upon this feedback, we are now implementing Phase-II of Project Muskaan with an objective to 'develop the whole school in STEM education'. This implies a comprehensive change initiative that brings Whole School Transformation by developing a STEM enriched learning environment and tinkering experience for students of middle school, and strengthening teachers' ability to use STEM learning resources.

Phase II involves the setting up of STEM labs, to provide STEM kits on various concepts, capacity building of the teachers to use and manage the lab as part of their daily teaching on STEM subjects, to assess the learning levels of the students, to use the space as learning and innovation centre and to demonstrate learning by creating new and innovative models related to STEM. The schools will also form STEM clubs based on their interest in STEM subjects and be mentored by experts (Rolls-Royce employees and NGO partners) to nurture students' interest for a future and career in STEM.

Under Muskaan we have conducted over 500 creative STEM workshops in schools, 100 capacity building sessions for teachers, and 150 exposure visits/science exhibitions. The school teachers shared that the attendance of students remarkably increased because of STEM activities – which we believe is the true measure of program's efficacy.

Our STEM ambassadors are supremely enthusiastic to volunteer and explain to kids how things work. Vernie Robot are particularly hit with kids, which is essentially speaking Coding 101A. A key take-away for us has been that when it comes to experiential learning, language is not a bar and kids are smart enough to explain their concerns and questions!!



NIRMAAN: With Agastya International Foundation, we run "Nirmaan" to make practical, hands-on science education accessible to rural government schools at 2 locations – Pune and Shillong. By running 2 mobile vans, we aim to reach out to ~32,000 students and 300 teachers annually and not only bring them better understanding of STEM concepts but also intend to spark curiosity and encourage questioning among the children. Each mobile science lab travels to doorstep of remote/rural schools with hands-on science models covering a wide range of topics in Physics, Chemistry and Biology for Class 5 through 10. The teaching approach is consistent with the National Curriculum Framework and the topics overlap the NCERT syllabus. Children are able to relate better to concepts explained through interactive demonstrations rather than through regular learning.

Agastya is a charitable education trust that runs the world's largest mobile hands-on science education program for economically disadvantaged children and teachers. Through all its programs, Agastya has reached over 8 million children and 200,000 teachers in 18 states in India. By making practical, hands-on science education accessible to rural government schools, Agastya aims to transform and stimulate the thinking of underprivileged children and teachers.

TAMANA: We support Tamana, a non-profit voluntary organization with the purpose of helping the cause of mentally challenged, multiple-disability and autistic individuals. We supported Tamana to build online educational series which would combine video lectures/ test series and educational games on a mobile application. These mobile applications can be used by the intellectually challenged as well as children with normal learning. This educational series supported by Rolls-Royce covers entire NIOS content with 2D/3D educational animation and moving visual media. The end deliverables include free of cost mobile application which would include video lectures & animation for Class 10th NIOS Curriculum.

During beta-testing of the app, developers realized that app download, updation & video integration was too heavy and as such shifted to YouTube as primary mode. The channel now has 186 unique subscribers and these lectures are used as part of pedagogy for NIOS Class X.

We continue to support annual fund raising event organized by Tamana. The event aims to create and enhance public awareness, understanding and acceptance of people with special needs. This initiative carries forward the theme of Full and Effective Participation and inclusion of differently abled in the society and respect for 'Differences'.



UNNATI – Scholarship Programme for Women Engineering Students: In partnership with CAF India & Buddy4Study, we have set-up a scholarship programme for women engineering students to identify and disburse annual scholarship of Rs 35,000 to 50 women students pursuing engineering degrees in the fields of electronics, computers, IT, aerospace & marine engineering. The scholarship amount will cover college tuition fee to pursue engineering from any AICTE recognized institution in India & provide mentorship to scholars.

This is one of its kind initiatives in India. There are only a handful of corporates providing scholarship to female students in tech areas and hardly 2-3 that provide mentorship.

We plan to further enrich the engagement of these scholars by having an option of "Shadow our Women Engineers" wherein scholars will be given a chance to shadow Rolls-Royce women engineers at our engineering centres in Bengaluru and Pune for a week and observe day-to-day working. It is widely acknowledged that mentorship is a key, but often missing, ingredient to promote and retain female talent in engineering & technologies.

UNNATI – Skill Development Programme for Women: Ministry of Shipping under Sagarmala project has taken an initiative in the field of Skill Development for Shipbuilding, Aerospace, Defence and Marine Sectors. This is in line with Prime Minister's initiative of 'Skill India'. CEMS provide holistic skill based training to the participants in gaining employment/entrepreneurship. The training imparted is in the niche areas of Design, Automation, Manufacturing, Robotics and Maintenance with focus on Industry 4.0.

Rolls-Royce's financial support will be utilized by CEMS to train 100 women participants at CEMS's Mumbai and Vizag campus. Such women participants will belong to BPL/financially challenged background. These courses make participant job-ready and thus providing an impetus to women empowerment in STEM skills.

CHEVENING ROLLS-ROYCE SCIENCE & INNOVATION FELLOWSHIP: The Chevening Rolls-Royce Science and Innovation Leadership Programme (CRISP) is a Fellowship funded during 2010-2018, by the Foreign and Commonwealth Office and Rolls-Royce for mid-career top level people in the field of science and innovation - with links to public policy - in India & Sri Lanka. A CRISP Fellow is keen to further causes of science and innovation through businesses, public administration, public policy and/or academics.



CRISP Fellowship play a crucial role in promoting and building the interfaces for social entrepreneurship. CRISP Fellows understand the power of science and innovation and its importance to businesses and sustainable future. These are the people driving change in India and vary from leading the discussion on smart cities, to governance & sustainability, to powering off-grid villages, to tackle health care issues to agribusiness innovations to clean energy to water conservation.

In 2015, the CRISP fellows formally registered a not-for-profit entity – CRISP Social Ventures, to promote science and innovation as a means to development.

100 MILLION MINDS: This initiative was a crowd-sourcing innovation approach piloted in 2017. Through 100 Million Minds project, we reached out to over 2500 students and asked them to think differently – how to reuse discarded components from Rolls-Royce businesses and were amazed how 6th/8th grade students came up with innovative ideas using only steel brackets, pipes and bushes. Winning team created an eco-cooler based on the principle of compression air cooling without using electricity

This pilot was recognised, as part of Rolls-Royce's CSR activities, by the Vice-President of India and Prince Charles during latter's visit to India on 9th Nov 2017, in its quest to empower generations to think differently and connecting corporations with communities

For more information:

ANUJA KADIAN Head – Government Relations & Community Investments India & South Asia

M: +91-98107-58682 T: +91-11-4181-1009 E: Anuja.Kadian@Rolls-Royce.com www.rolls-royce.in