NOKIA SOLUTIONS & NETWORKS INDIA PRIVATE LIMITED

CORPORATE SOCIAL RESPONSIBILITY (CSR) REPORT
2020-2021
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<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<tr>
<td>GNI</td>
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<td></td>
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<tr>
<td>DEF</td>
<td>Digital Empowerment Foundation</td>
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<tr>
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<td>Save the Children</td>
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<tr>
<td>SDMA</td>
<td>State Disaster Management Authority</td>
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<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
<td></td>
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<tr>
<td>PHC</td>
<td>Primary Healthcare Centre</td>
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</table>
Dear Readers,

As the COVID-19 pandemic continues to test the resilience of individuals, societies, organizations and economies at an unprecedented scale, a threat to the state of existing affairs around the world has posed itself on a scale unseen in this century. According to the United Nations (UN), the pandemic has the potential to take back decades of progress in the battle against poverty, social justice and climate change, while also worsening inequality between and within countries.

Quick thinking and innovative solutions and support for the underprivileged is the need of the hour. This challenge is enormous, but we at Nokia believe that the technologies we develop will play a critical role in connecting remote areas of the country, creating awareness and enabling smart solutions for development and aid.

Connectivity and digitalization have the potential to significantly improve economic, educational, health, and environmental opportunities, as well as allow long-term productivity growth. At Nokia, we leverage our core competencies to address urgent challenges while helping the underprivileged populations through our flagship program - Smartpur. These promote our goal to improve lives with the help of technology. Within our Smartpur program, we have utilized our core competency of connecting the un-connected to help remote communities access quality services across the pillars of health, education, livelihoods, financial inclusion and governance using digital technology.

It has been our endeavor to collaborate and support those sections of the society that do not have access to basic necessities and services. We have directed our focus to align with the Government's Digital India Mission, which aims to integrate underserved communities into the modern digital economy. In India, we used our existing network of 100 Smartpur centres to create awareness, provide aid to returning migrants in rural locations, sustain education for children, and facilitate access to banking services and govt. schemes.

Our Smartpur program was set to expand to four new districts across the states of Maharashtra, Rajasthan, Assam, Andhra Pradesh. However, as the pandemic hit, we quickly changed our focus to more immediate needs of these communities and supported them with food and hygiene kits. Over 17,000 families were supported through this. We also supported a public health centres with masks, PPE kits and essential hygiene supplies as per need.

Simultaneously, in line with applicable govt. regulations and COVID appropriate best practices, we expanded our footprint of Smartpur centres from 100 to 260 villages during the year.

The past year has shown tremendous growth in the reach and scale of the Smartpur initiative. Through our programs, we impacted the lives of over 2 lakh people during the year.

We look forward to a deeper engagement with all our partners, beneficiaries, local administration and employees to accelerate the impact of our work in the field. As we recover from the pandemic, our efforts will be focused on bringing about sustainable change in the communities we serve.

With Warm Regards,

Sanjay Malik
Senior Vice President and Head of India Market, Nokia
ABOUT NOKIA

We create critical networks and technologies to bring together the world’s intelligence, across businesses, cities, supply chains and societies. We deliver networks for mobile, infrastructure, cloud and enabling technologies.

With our commitment to innovation and technology leadership, driven by the award-winning Nokia Bell Labs, we deliver networks at the limits of science across mobile, infrastructure, cloud, and enabling technologies.

Adhering to the highest standards of integrity and security, we help build the capabilities we need for a more productive, sustainable and inclusive world.

We have customers in nearly 200 countries. Our technologies transform the way people communicate and connect with each other and things. At the end of 2020, we employed 89,978 people in 116 countries.

For our latest updates, please visit us online [www.nokia.com](http://www.nokia.com) and follow us on Twitter @Nokia

Nokia In India:

In India, Nokia has been connecting people since 1995, the first GSM call was made on a Nokia handset over the Nokia network.

From enabling growth of the 2G technology, bringing high quality 3G services, pioneering 4G to now steering India towards the 5G revolution, we have been an integral part and celebrate this journey of 26 years of mobile telephony in India.

Every single call in India, touches a Nokia network element in the complete call flow and 1/3rd of overall mobile subscribers in India are served by Nokia Radio.

Today, 4 telecom operators rely on us to provide high quality and far-reaching telecommunication. We also supply telecom infrastructure to the Indian Defense and Indian railways including the Kolkata Metro.
Climate Action
Nokia is now among the first 87 companies to accelerate its commitments and recalibrate its emissions targets to do its part to limit global warming to maximum 1.5°C. As a 'natively green' next-generation mobile connectivity solution, 5G is more energy efficient than 4G, yielding lower energy usage per bit. One example is Nokia’s ReefShark chipset, which can reduce the power consumption of base stations by up to 64% while simultaneously improving performance. Another is Nokia’s unique liquid cooling system, which can reduce a base station’s CO2 emissions by up to 80%. We have delivered zero emission products to over 150 customers worldwide. The customer base station sites we modernized used on average 54% less energy (46% in 2019) than those where our customers did not modernize.

Addressing Human Rights
In 2020 we continued to provide anonymized real case examples from our Human Rights Due Diligence work in collaboration with Global Network Initiative, a growing alliance of Internet and telecommunications companies, human rights and press freedom groups, investors, and academic institutions from around the world.
From advancing accountability to advocating for laws and policies that protect free expression and privacy rights worldwide, our members are working together to get results.

Supply Chain Transparency
Our supply chain is an important but complex part of our business and our reputation, and despite its complexity and depth we work hard to try to ensure it is transparent, and ethically, socially and environmentally well-managed.
We identify and understand the risks associated with our supply chain and build and implement the programs and actions that help mitigate those risks. We employ a variety of audits and assessments to verify the integrity of our supply chain. We engage and increase supplier capabilities through learning and where necessary instigate remediation activities.

Improving Lives
We build the crucial networks and technologies that connect people across industries, cities, supply chains, and communities. Our technology allows people to stay connected to the people they love most, as well as to have access to jobs and education. It gives people improved access to healthcare, information, and community services, and also market opportunities.
Since 2016 over 3.8 million people have benefitted from our community investment programs globally, so we reached our 2025 target of improving the lives of 2 million people ahead of schedule.

Critical Connectivity During the Pandemic
Connectivity and technology proved its mettle as it brought together people isolated from each other as a result of the pandemic. We adapted our ways of working to ensure that our people remain safe while our operations continue.
CSR VISION AND MISSION

Vision-
In line with our company’s vision of ‘Connecting People’ through our CSR initiatives in India, we strive to bridge the digital divide by connecting remote villages through technology and making possibilities available at their doorstep.

Mission -
Our Corporate Responsibility mission is to promote technology that strives to solve society’s challenges and enables new opportunities, digitally connecting communities to have the capacity to use technology in order to improve their quality of life.

We also proactively undertake initiatives to meet the emerging needs of the country.

THEMATIC FOCUS
OUR APPROACH TO CSR

At the core of our CSR approach is the belief that technology has the potential to improve people’s lives. Connectivity and associated activities are at the heart of what we do. By linking people through technology, we enable access to education, knowledge, better healthcare, and more opportunities. Connectivity promotes a more equitable society, as well as a cleaner and healthier climate.

Our CSR strategy has been developed in alignment with the United Nations Sustainable Development Goals and is motivated by our commitment to bridging the digital gap and harnessing the benefits of technological advancements for the greater good. We implement projects in partnership with non-profit organizations, as well as promote and invest time in design thinking to enable our partners visualize and implement breakthrough ideas.

ALIGNMENT WITH THE SUSTAINABLE DEVELOPMENTAL GOALS

The United Nations Sustainable Development Goals (UN SDGs) and their targets remain a key framework for our CSR activities. Our priorities are mapped against our most material UN SDGs - where we can have the greatest impact. We believe that through our programs, we provide positively contribute towards the following SDGs:

• Good health and wellbeing
• Quality Education
• Decent work and economic growth
• Industry, Innovation and infrastructure
• Partnerships for the goals
MONITORING & EVALUATION

Nokia has always placed a strong focus on monitoring and evaluation of its initiatives. While taking up new CSR initiatives and programs, we pay close attention to ensuring that funds are utilized with the intention on impact and an actual need has been identified.

The CSR working group of Nokia comprising of multi-skill professionals, review project progress on a monthly basis and provide direction towards project strengthening and ensure that projects are being executed as per agreed framework and timelines.

The CSR Committee of the board reviews project progress every quarter and provides strategic inputs and takes decisions on project strategy and course correction.

To drive greater rigor in project execution, a third-party organization has been onboarded to carryout third party monitoring and carry out capacity development trainings for the implementation partners.

This comprehensive approach leads to tangible results that can be witnessed at a ground level.

MONITORING TOOL

Effective monitoring and transparent processes are fundamental to drive progress of companies in terms of long-term impact of social interventions. A robust, integrated system can transform the ways in which projects are managed, monitored and reported. It also helps in streamlining the key processes that drives innovation and growth.

Nokia has set up an online MIS system to monitor and manage its interventions. This helps all stakeholders in understanding and being aware of the interventions, performance of projects and the meaningful impact the projects are creating in the communities.

Dashboards give insights on progress made while the interactive map allows project performance to be viewed across different regions.
OUR CSR JOURNEY (2015 – 2021)

- **FY 2015**
  - 1 implementation partner
  - 2 states
  - Impacted 2 locations

- **FY 2018**
  - 2 Implementation partners
  - 7 States
  - Impacted 100 Villages

- **FY 2021**
  - 4 Implementation Partners
  - 9 States
  - Impacted 260 villages
PARTNERSHIPS

We work closely with different partners in co-creating and designing our initiatives. While Nokia brings in its core competency in technology, our partners assess the needs of the communities and implement the projects on ground using context specific execution strategies.
## PROJECTS OVERVIEW & HIGHLIGHTS of FY 2020-2021

### PROJECTS OVERVIEW

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<th>Project Description</th>
<th>Details</th>
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<tr>
<td><strong>Smartpur – Developing Digitally enables ecosystems in India</strong></td>
<td>Nokia’s Flagship CSR initiative called Smartpur creates digitally-integrated ecosystems where people leverage digital tools to bring efficiency in daily lives, get access to government and other services resulting in economic prosperity for households. This project is executed in partnership with Digital Empowerment Foundation and Save the Children (Bal Raksha Bharat)</td>
</tr>
<tr>
<td><strong>Providing aid to underserved populations during the time of Covid</strong></td>
<td>The impact of the pandemic has left a large population of our country to face unfortunate circumstances. Nokia has extended extensive support to families who are unable to procure basic essential food and hygiene materials as well as distribution of medical equipment and resources to frontline workers. Nokia also supported the State Disaster Management Authority of Tamil Nadu by contributing to their Covid relief corpus.</td>
</tr>
<tr>
<td><strong>Remedial education for out of school migrant population</strong></td>
<td>Nokia in collaboration with Samridhdhi Trust has been working towards supporting out-of-school children of migrant laborer community to integrate and continue in mainstream schooling system.</td>
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<tr>
<td><strong>Research on network robotics and its application towards enhancement of SDGs – IISC Bangalore</strong></td>
<td>Establish a network robotics laboratory that will be available to the academic and innovation system to carry out research on using 5G and AI technologies for socially relevant problems.</td>
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### HIGHLIGHTS of FY 2020-2021

<table>
<thead>
<tr>
<th>No of households/families impacted</th>
<th>Presence in number of villages</th>
<th>Number of states</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,52,713</td>
<td>260</td>
<td>9</td>
</tr>
</tbody>
</table>

**Covid aid and support for families**

- 20,500 Food kits
- 18,650 hygiene kits

**Support to govt health center**

- 4014 PPE kits
- 41,700 (40,000 surgical & 1,700 N95) face mask
- 1,500 sanitizers
DEVELOPING DIGITALLY ENABLED ECOSYSTEMS IN INDIA - SMARTPUR

Smartpur as a concept has been designed for creating a sampooma gaon (holistic village) or a digitally-integrated ecosystem where people leverage digital tools to bring efficiency in daily lives resulting in economic prosperity for households and ease of access to various kinds of services and information.

It is a model concept that has been conceptualized in a manner that challenges and redefines the existing idea of smart villages, which is based more on the availability of digital infrastructure but not as much on the integration of the infrastructure into the daily lives of communities. We believe that the mere availability of digital tools and Internet connectivity alone does not make a village smart; instead, it is the integration and optimum utilization of these resources for social, ecological and economic impact that truly makes a smart village and digitally strengthens five pillars of development.

The five pillars being education, health, livelihoods, governance and financial inclusion.

The concept of Smartpur is based on the idea of integrating technology into current practices and procedures, allowing community members to improve their lives and contribute to the village’s general well-being. Smartpur digital village ecosystem has been designed keeping in mind its sustainability, scalability, replicability and large-scale impact in a hub-and-spoke model.

Through Smartpur, the capacities of entrepreneurial local youth are developed, and they are supported to help deliver services to the community through a sustainable business model. Over the past 3 years, the project has expanded to 260 villages across 9 states.

Micro ATM services (money transfers / deposits / withdrawals) at the Smartpur centres has seen tremendous demand and has grown manifolds since the beginning of the project

<table>
<thead>
<tr>
<th>Year</th>
<th>Transactions worth INR</th>
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<tbody>
<tr>
<td>2018-19</td>
<td>1.2 crores</td>
</tr>
<tr>
<td>2019-20</td>
<td>7.01 crores</td>
</tr>
<tr>
<td>2020-21</td>
<td>22.73 crores</td>
</tr>
</tbody>
</table>
DEVELOPING DIGITALLY ENABLED ECOSYSTEMS IN INDIA - SMARTPUR

Different services being provided through smartpur centres:

<table>
<thead>
<tr>
<th>Education</th>
<th>Health</th>
<th>Livelihoods</th>
<th>Governance</th>
<th>Financial Inclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Literacy Classes</td>
<td>Telemedicine services</td>
<td>Livelihood skill enhancement</td>
<td>Connecting people to government schemes</td>
<td>Financial awareness workshops</td>
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<tr>
<td></td>
<td></td>
<td>training and workshops</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After school support</td>
<td>Health camps</td>
<td>Career counselling workshops</td>
<td>Governance awareness camps</td>
<td>Facilitating digital banking services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>including access to credit</td>
</tr>
<tr>
<td>STEM learning workshops</td>
<td></td>
<td></td>
<td>Grievance redressal sessions</td>
<td>Micro ATM services</td>
</tr>
</tbody>
</table>

Beneficiary footfalls across different pillars (FY 20-21)

<table>
<thead>
<tr>
<th>Education</th>
<th>Health</th>
<th>Financial Inclusion</th>
<th>Governance</th>
<th>Livelihood</th>
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</thead>
<tbody>
<tr>
<td>• 6281</td>
<td>• 76291</td>
<td>• 62251</td>
<td>• 57399</td>
<td>• 22177</td>
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</table>

Smartpur footprint expansion over the years

<table>
<thead>
<tr>
<th>Year</th>
<th>States –</th>
<th>Smartpur centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>2019</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>2020</td>
<td>7</td>
<td>100</td>
</tr>
<tr>
<td>2021</td>
<td>9</td>
<td>260</td>
</tr>
</tbody>
</table>
Ms. Jyothi is 29 years of age and belongs to a small village called Ramapura in the district of Kollegal (Karnataka). She was married at the age of 19 and now lives with her husband and 8yr old boy who is in 2nd grade.

Her incomplete education was of little help to the family. Jyothi was faced with consecutive failures at all the jobs she had applied for. She landed up in a difficult situation when her office, where she was an office assistant at CMRC (Community Managed Resource Center) had failed to pay her salary due to insufficient corpus funds and her husband’s salary wasn’t sufficient to fulfill the household requirements which included rent and her son’s education.

Her situation led her to the concept of Nokia Smartpur center in her village, after which, she proactively took the risk of leasing a small place in order to start her own Smartpur center and become a Smartpur entrepreneur. Her revenues in the first month was Rs. **1500 per month**.

The Smartpur team worked alongside her to help her increase her revenues. Gradually, she started attending various SHG group meetings and joined together with other women groups to talk about the services provided under Smartpur. She supported many women and elderly to access various government schemes under State Bank of India, MUDRA (Micro Units Development and Refinance Agency) Scheme etc. through her Smartpur center. Towards the end of the year, she managed to sanction more than 8 lakhs under the applications submitted for MUDRA loan where she earned a commission of **Rs.18,000**. She took the initiative and applied for her CSC license and created a FINO bank account.

Her present monthly average revenue is Rs. **15,000 month** and she has now purchased a two-wheeler from the income generated from being a Smartpur entrepreneur. She also became an influential figure in the village and contested for the gram panchayat elections. Jyothi aspires to open a community library and digital tailoring center in the same building to strengthen the education system for girls and empower women.
SUCCESS STORY – SMARTPUR

Vijayalakshmi, aged 65 is a resident of Kuruvimalai, a small village in Kanchipuram district. She is a single mother, and her immediate family comprises of her two sons namely Sivaraj and Karthick. The elder son is married and lives separately, he supports the family with his minimal income. Her younger son aged 32, lives with her and works for a private company.

During the time of the lockdown, Vijayalakshmi realized that without any income the family will not be able to sustain for more than a month, she reached out to the Smartpur coordinator in search of any opportunity.

She learned that the center was looking for an extra pair of hands to make face masks that were to be used during COVID 19. She individually made around 645 masks in a short period of time and earned a small income of Rs. 3870 (Each mark bearing Rs. 6) which helped her family during the difficult time.

Now, benefitting from the training she had received during mask making, she has started her full-fledged shop where she trains women on stitching different ladies’ garments.
HEAR FROM OUR ENTREPRENEURS...

Name: Md. Aslam  
Father’s Name: Majid  
Smartpur Centre Name: Ladamka Hub Center  
Education: Graduation

Aslam says – “I earned my graduation in 2015 and tried hard to get a job for myself so to help sustain my family but all efforts were in vain. By doing farm work, I gained INR 3000 a month but it wasn’t enough to meet the needs of the family. There were days when we had to borrow money on interest for survival.

In 2018, my friends told me about the new Smartpur center establishment and opportunity by DEF & Nokia. I was quite hesitant to work as an entrepreneur but looking at family situations I enrolled. After a few months, the income increased and I realized that I could earn more money by adopting few measures like village announcements, door to door mobilization etc. Crowd started gathering at my center and my revenue increased.

From earnings of INR 3000, now I earn INR 18,000 - 20,000 monthly and family needs are met with ease. I’m totally grateful to Nokia & DEF for helping me pay my debts and help my family sustain in such a graceful manner. Now, my whole village looks at me and my family with respect and believes in my work. This work not only gave me increased revenue but also provided me with an improved image in our village.”
ENTREPRENEUR SUCCESS STORY

Name: Md. Sajid  
Father’s Name: Hasan Mohammad  
Village: Babupur Spoke Center  
Education: 12th + ITI

Sajid completed his 12th and pursued Diploma as he had to share household responsibilities along with his brothers. He then started his job in SP office on contractual basis but his contract wasn’t renewed after a year and he stayed unemployed. He thought of acquiring a CSC license and start his business since a job may last for a year or two and survival and security will be a question once the contract gets over.

He started his CSC work as an operator in his own house but he wasn’t able to afford the IT equipments. He visited the Village Sarpnach for help and to borrow money but Sarpanch informed him about the Smartpur coordinator selection process being conducted by DEF – Nokia project. The very next day he submitted his resume and documents to DEF Coordinator and later he was selected by DEF Head Office. He now has his own internet tower installed at his house and Nokia provided him with many IT equipments which helped his revenue to grow.

He earlier earned INR 4400- 4500 on monthly basis but now his revenue is INR12,000-13,000. He is the highest earner among all his brothers and also has gained community respect.
PROVIDING AID TO UNDERSERVED POPULATIONS DURING THE TIME OF COVID (1/2)

The COVID-19 pandemic has fundamentally shifted the way people live and work. COVID-19 and attempts at containing the same through lockdowns have impacted the underprivileged the most.

The pandemic had also affected children very adversely in a number of ways, from discontinuity of education, unsafe migration, child labour and trafficking, abuse of rights violations to loss/separation of parents/caregivers.

In such a scenario the support extended by Nokia could provide the families with basic essentials of hygiene kit and food supplies. The support provided to government public health centres was one of the initial supports when government itself was struggling to meet the needs of hospitals and health centre of PPE kits, face mask and sanitisation materials for their health staff and frontline workers.

Amid the crisis, Nokia supported affected households in Smartpur villages in partnership with Save the Children India (Bal Raksha Bharat). COVID-19 Humanitarian Response support by NOKIA was carried out in 160 villages wherein over 17,000 households benefitted.

The quality and widespread reach of response was upheld through a detailed aid plan, clear strategies, participatory beneficiary selection process and partnership & collaborations with different Institutions and local administration at all stages.

A visit to the villages, Interaction with the Households and communities, assessing each and every Households’ vulnerability was conducted with the help of the Village Secretary and other functionaries. This along with communication to the department officials of the District Administration was done initially to assess the situation and needs of affected population. Beneficiary selection criteria were listed to cater to the most immediate needs and to reach the most vulnerable.

While interactions with the District Authorities were ongoing, the office of the District Medical and Health Officer revealed the needs of Personal Protective Equipment (PPE) to the PHC and CHCs as there was high demand for testing and daily treatment of COVID-19 patients.

Safety & security measures were strictly adhered to ensure that there would not be any further harm. We also took measures to ensure the wellbeing of our staff engaged in distribution and other facilitation.
PROVIDING AID TO UNDERSERVED POPULATIONS DURING THE TIME OF COVID (2/2)

![Diagram showing aid distribution]

- 20,500 Food kits distributed
- 18,650 Hygiene kits distributed
- COVID awareness drives across 260 villages
- Health camps attended by 404 households

CONTRIBUTION FOR DISASTER RELIEF – SDMA, TAMIL NADU

Nokia also supported the State Disaster Management Authority of Tamil Nadu by contributing to their Covid relief corpus during their time of need.
CASE STUDY – COVID AID (1/2)

In the Nashik District of Maharashtra, there is a small village named Waregaon which lies within the Sinnar block.

Nijam, a resident of this village had been working as skilled labourer for years until the 2020 pandemic. It all came to a halt when he contracted the COVID-19 virus during the initial pandemic surge in Maharashtra. The virus left him bed-ridden, he underwent treatment in a Government Hospital at Nashik which consumed a large sum of the family's savings.

Post recovery employment became an added challenge, lockdown restrictions and COVID-19 protocols had put a stop to all ongoing activities. Him and his family of 7 members including his wife and sons were impacted deeply, his son, Salim had to start working petty jobs under stressful conditions to meet the needs of the family.

During COVID-19 response, his family was first among the beneficiaries who received food baskets and hygiene kits as aid during the difficult time. The ration provided to the family helped Nijam with providing food for his family.

“The relief material would be sufficient for family’s needs until we fill the financial void which COVID-19 has created in our lives. This is such a relief and mental peace in this certain time..” says Nijam
CASE STUDY – COVID AID (2/2)

A substantial number of people in Dungarpur district of Rajasthan migrate out of their villages in order to make a livelihood and support their family needs. They usually aren’t able to manage to go back home for several months on end.

The COVID-19 outbreak was hard hitting for these migrants in a number of ways, and they were compelled to return to their villages on an immediate basis.

Rakesh, a 32-year-old man was among those migrants rushed back to his village from Ahmedabad. He had been working as a plumber in Ahmedabad (Gujarat), being the sole earning member to the family, he was faced with the frightening challenge to support his family.

The severity of the situation kept increasing for migrant workers, daily wage workers, and agricultural persons since all the activities were shut down during lockdown restrictions. Rakesh who lost his livelihood, was left with no choice but to return home to safety. His family had survived two months using previously deposited capital but as time went by, the problem of arranging food and essentials became grave.

Our team learned of the issue while going from house to house understanding the needs of the people. They provided Rakesh’s family with food and hygiene kits which helped them survive the effects of the pandemic.
REMEDIAL EDUCATION FOR OUT OF SCHOOL CHILDREN OF MIGRANT POPULATION

Nokia in collaboration with Samridhdhi Trust has been trying to tackle the problem of school drop-outs of children since 2015. The economic attractiveness of big cities such as Bangalore or Delhi NCR has led thousands of families to migrate to these cities at the expense of their children’s education. Not only are those children missing years of education, but some of them have also never set foot in a school before. Till date we have supported 2,233 migrant children in gaining an education.

Samridhdhi Trust located in Bangalore and Indirapuram, has been working to help out-of-school children of migrant labourers integrate and continue in mainstream school. Out-of-school children are provided with a quality education, a conducive atmosphere, and support resources such as transportation, mid-day meals, educational materials, and uniforms.

A number of children that are enrolled in the program come from difficult backgrounds and have faced disturbing childhoods ranging from being rag pickers, doing household chores, taking care of their siblings, along with a some who were exposed to drug abuse, domestic violence, illegal and harmful activities in the past. Together with Nokia’s support and Samridhdhi’s expertise in the field of education, we have been able to reach out to a wide range of children under the project.

Education is the keystone of lifting these children and their communities out of their current situation and find a long-term solution. Our approach is the key component of our action – we do not just address the problem; we have designed a specific way to do it with the maximum efficiency.

The program’s structure heavily relies on long-term impact. Most of the children participating in the program are first-generation students from low-income families. They would need assistance in order to continue their education once enrolled. As a result, the program has two parts – remedial bridge education to facilitate enrollment of out-of-school children from migrant families and support classes for the enrolled children to ensure no drop-out. Through this approach, the program aims to help the children overcome the barriers to entry into schools and mainstream them into age-appropriate classes. Further, it works towards ensuring that they continue their education.

To ensure holistic development of the children, the intervention includes value-based life skills classes, sports and other co-curricular activities. This has gone a long way in enhancing access, improving scholastic performance and infusing confidence in the children. Exposure to innovation and technology has been a primary component in the program which ensures that students feel comfortable with using technology in their education process.

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<th>Children supported over the years</th>
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<td><strong>1793</strong></td>
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<td>Children supported through bridge education</td>
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CASE STUDY - REMEDIAL EDUCATION FOR OUT OF SCHOOL CHILDREN OF MIGRANT POPULATION

During the process of conducting the baseline study for the 20-21 academic session, Samridhdhi Trust came across an 8-year-old girl named Jhamela. Jhamela belonged to a family of ragpickers, her father, Jamaluddin had moved to Delhi in search of a livelihood in 2019 where he joined the rag picking community.

Jhamela was required to give up her education at a tender age. Samridhdhi Trust found that she did not fulfill the basic minimum literacy & numeracy as per her age. Her parents were busy striving for basic survival, and education was not their priority.

Samridhdhi Trust convinced Jhamela's parents to send her to their school, they spoke about benefits of the program such as two free meals and regular health check ups for children. Samridhdhi Trust Bridge Project is supporting the Child to carry on with her improvement of education along with hygiene awareness & Covid protocols.

Today, we have seen a remarkable improvement in her numeracy, literacy & logic skills. Jhamela has also developed an interest in sports through the holistic development initiatives which help children hone their skills.

Jhamela has set an example in her community by joining the Bridge Project where she regularly attends online & cluster classes. She also motivates other younger children & their parents to understand value of education as an investment that can change their living conditions for the better. Above all, Jhamela has turned her aspirations and dreams around. Now she is looking to complete her Bridge education and further gain admission into a mainstream School, she aims to study hard until she becomes employable & manages to lead a respectable life by her own standards.
ADAPTING TO THE COVID SITUATION - REMEDIAL EDUCATION FOR OUT OF SCHOOL CHILDREN OF MIGRANT POPULATION

The migrant population have been the worst hit during the pandemic, lack of jobs, no food security and a ban of movement have caused a sudden halt to the livelihoods of these workers. Daily wages, daily wagers, are the means of survival for the population and they are now forced to live in atrocious living conditions within urban and semi urban settlements.

The economic condition of migrants was harsh at the dawn of the crisis as well, especially so during the nationwide lockdown. Low income, provided through daily manual labor charges, a lack of savings due to their low incomes; a dependency on daily wages and little to no backup plans in case of crisis – had caused a dent on their resilience.

These families were left with no choice but to walk, use any measure to get back home to their villages.

In order to avoid situations such as the ones faced in Delhi NCR where thousand of migrants moved back to native at once, causing tremendous contamination risks across the country, we had to act and find immediate support for their survival.

Our team actively volunteered to conduct food and other necessity distributions in and around the settlements, the distributions helped cushion the impact of the catastrophic pandemic.
Nokia has collaborated with the Indian Institute of Science in Bangalore to establish a network robotics laboratory that will be available to the academic and innovation system which can be used by Start Up’s, entrepreneurs and others.

The objective behind this initiative assist in carrying out meaningful research on design of next generation networks and application of Artificial Intelligence for solving societally relevant problems.

With a growing demand for the ever-expanding requirement of robotics technology across multiple fields, such as search & rescue, immediate aid supply, performing hazardous tasks, cognitive development, academia and social care, expediting robot operations is becoming increasingly necessary.

IISC in collaboration with Nokia has been working on addressing this issue using low latency high performance 5 G networks which can help in developing and demonstrating a multi-robot simulation framework, developing a multi-robot path planning framework that uses spatial-temporal information from the network to impose operational safety constraints and many more gaps in technology.

The hypothesis here is that a reliable network infrastructure can be used to develop solutions such as:

- Fast and safe multi-robot operations with enhanced spatio-temporal awareness of humans and robots using Edge devices.
- Proactive collision detection and avoidance in areas of less visibility such as alleyway crossings and corners
- Fault tolerant robot operations with dynamic task (re)allocation
Nokia is committed to taking on more projects in line with the emerging needs of the country.

As we move into the next year, Covid-19 response initiatives that include setting up makeshift hospitals, strengthening health infrastructure for Covid-19 treatment and support to vulnerable groups will take precedence.

We also plan to continue extending support towards our Smartpur locations and further plan expansion to newer locations covering more geographies and connect more people.