

ANNUAL REPORT 2020-21

Empowering Communities for a Better Tomorrow



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VISION

Development that enables sustainability and community empowerment

MISSION

To be a centre of excellence in sustainable development that

- Builds knowledge, capacities, partnerships and models of development
- Promotes effective execution for environmental integrity and creating and sustaining livelihoods
- Improve quality of life, especially of marginalised and vulnerable communities
- Nurtures innovation and learning

VALUES

- Integrity
- Sensitivity
- Respect
- Passion

President's Message

At the outset, I hope you and your family are safe. This has been a very challenging year for all of us, and our resilience has been tested like never before. TCSRD decided to focus on a broad approach of supporting the local vulnerable and marginalised communities and working even more closely with the government especially at local levels.



Through the unusual year 2020-21, we continued our commitment to stimulate economic activity, enrich the quality of life and focus on health and safety in the regions we operate in while strengthening our relationships with the communities. The Covid-19 pandemic has given rise to newer ways to engage with the community with focus on collaborations, communication and digitalisation.

It gives me immense pleasure to release this 40th TCSRD Annual Report 2020-21, which puts a spotlight on our programmes. Our efforts are to promote livelihood opportunities, education, skill development, nutrition, health, conservation and preservation of biodiversity, thereby improving quality of life of communities.

TCSRD's programmes have been designed to improve the land, introduce improved agriculture practices and livestock management systems. With focus on institution building, TCSRD facilitated the formation of the Okhamandal Farmer Producer Company Limited (OFPCL) which would benefit approximately 1,200 farmers. TCSRD has been working on various skill development programmes (both online and physical). This year due to the pandemic, as schools were closed we evolved our education programmes to connect with the students digitally to reduce learning loss. During the year, Okhai transformed itself into a marketplace to support rural artisans across the country to sell their products and earn livelihood during the pandemic. We continue to support livelihood of women through our cluster development programme. TCSRD worked towards inclusion and empowerment of women, scheduled caste, scheduled tribe and other vulnerable sections of society and maintain community engagement through virtual connects and celebrations, small group meetings, phone calls, WhatsApp calls etc.

An important intervention is our effort to promote Holistic Nutrition with focus on women's and children's health, clean and safe drinking water with household and community level water purifier systems through Samriddhi and Swach Tarang Project. We also focussed on Covid-related awareness - social distancing, basic hygiene, food security and mental health. We continue to focus on water management and conservation activities, waste management, preservation of biodiversity and mitigation of climate change impacts.

I take this opportunity to thank all the partners, stakeholders and volunteers for joining hands with TCSRD and working with us to increase our reach and empower the community.

TCSRD Operational Areas

TCSRD has its presence across many geographic areas in India through its partnership programmes on various sustainable development goals.



GUJARAT

The foundation for TCSRD was laid in the 1980s in Mithapur, Dwarka taluka in the Devbhumi Dwarka district.

At Mithapur, TCSRD has been working in the Okhamandal and Kalyanpur blocks. Mithapur is home to the Chemicals division of Tata Chemicals Limited and lies on the westernmost tip of the Saurashtra peninsula. Vaghers represent the most prominent community here in addition to the Lohanas, Rajputs, Rabaris, Muslims and those from Scheduled Castes and Tribes. The main occupation of people here is agriculture, which is subject to a highly erratic monsoon. The economy of the region is also dependent on religious tourism — Dwarka, Nageshwar and Beyt Dwarka are famous Hindu pilgrim sites in the region.

TCSRD has been running the Learning & Migration Programme (LAMP) in areas having high migratory population (including salt workers or agariyas) in eight selected districts of Gujarat -Surendranagar, Kutch, Amreli, Bhavnagar, Dang, Banaskantha, Morbi and Patan.

TCSRD in collaboration with Rallis India Limited has been supporting educational initiatives in the Bharuch district of Gujarat State. TCSRD works with the community residing in the 5 to 10-kilometer periphery of the Rallis manufacturing plant with a special focus on education.



MAHARASHTRA

TCSRD runs a Holistic Nutrition programme in the Pati block in Madhya Pradesh, and in Dharni block in Maharashtra.

Dharni Block – Amravati: The people living in this region are from the marginalised Korku tribal community with barely any access to medical care, sanitation and proper hygiene. The children in the area have a high incidence of malnutrition, while anaemia is common among women. TCSRD has taken up Holistic Nutrition initiatives in this region, owing to widespread undernutrition among the population.

TCSRD in collaboration with Rallis India Limited has been working in Latur, Beed, Ratnagiri, Akola, Raigad, Palghar and Thane districts of Maharashtra with a focus on Education, Tribal Model Village, Water Conservation, and Skill Development. Latur and Beed are known as water stress region hence water conservation is a major focus in these regions. Palghar, Thane and Raigad have a good percentage of Tribal population and are known for malnutrition, low-income generation region hence Tribal Model Village, Skill Development are in focus. Akola and Ratnagiri have manufacturing sites hence the focus is on water conservation, education and skill development in the community within 5 to 10 km periphery of manufacturing sites of Rallis.



MADHYA PRADESH

Pati Block – Barwani: Barwani is a remote and rocky district at the southernmost

corner of Madhya Pradesh, in the border of Maharashtra and Gujarat. Many of its villages are located in hilly regions, cut off from roads and access to markets. TCSRD has taken up Holistic Nutrition initiatives in this region, owing to widespread undernutrition among the population.



UTTAR PRADESH

TCSRD is working in Farrukhabad, as well as Hardoi districts in Uttar Pradesh, on the Unnati programme for agriculture development.



WEST BENGAL

TCSRD has been working on conservation of mangroves linked to livelihood opportunities for local communities at Rangabelia, 24 Parganas, Sundarbans.



ANDHRA PRADESH

TCSRD has initiated interventions in neighbouring villages of Tata Chemicals' manufacturing unit in Mambattu (Tada block, Nellore district). The interventions have been designed after baseline data collection in the target villages. The focus is on improving learning abilities of the children going to government schools and promoting preventive health care practices among the families who are mainly from the scheduled caste.



TAMIL NADU

TCSRD has initiated development activities around Tata Chemicals' manufacturing plant sites in the Cuddalore region, in Tamil Nadu. The focus is on drinking water, education and livelihood.

PAN INDIA PROGRAMMES



 Promoting and supporting artisans through Okhai
 Centre for Empowerment



Furthering its efforts and reach to a larger community, through the two centres of excellence:

- Centre of Excellence for Sustainable Agriculture & Farm Excellence ('C-SAFE')
- Centre for Sustainable Conservation Action for Protection of Ecosystems of the Seas ('C-SCAPES')



Introduction

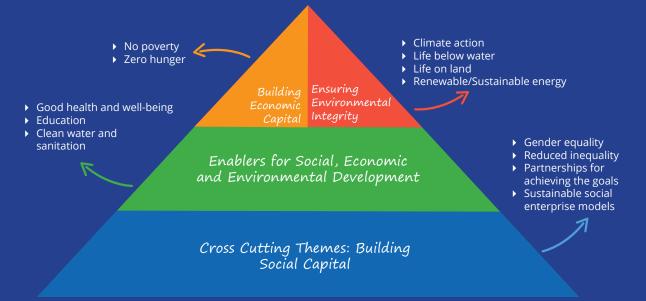
Tata Chemicals Society for Rural Development (TCSRD) adopts an integrated approach to development, and designs region-specific, need-based development programmes following a participatory development approach for encouraging ownership of the community. Needs are identified based on household surveys, focused group discussions, participatory rural appraisal (PRA) and secondary sources.

TCSRD is guided by its vision of 'Development that enables sustainability and community empowerment'. The programmes are closely aligned to the United Nations Sustainable Development Goals.

Our priorities are mainly;



TCSRD conducts impact assessment of its programmes every three years, with the help of external institutions to understand the effectiveness of its programmes, and designing the next level interventions accordingly. TCSRD works in partnership with Government, NGOs, educational institutions and technical organisations to benefit from their expertise and knowledge in achieving higher impact across its community development projects.



Overall impact 2020-21

Building Economic Capital

Farm Based Livelihood

- Number of farmers covered under various programmes: 6,878
- Number of cattle covered under livestock development programme: 53,000+

Non-Farm Based Livelihood

- Number of youth covered under skill development: 1,636
- Number of artisans impacted Okhai: 27,534 till now
- Number of artisans impacted Cluster: 45 new, 255 till now
- Sales of traditional handicrafts (lakh) Okhai: 1,057.1
- Sales of traditional handicrafts (lakh) Cluster: 15.51

Ensuring Environmental Integrity

- Number of people covered through environment projects: 6,084
- Number of mangroves planted: 1,15,000
- Whale sharks rescued: 34 rescued (813 till date)
- Jal Dhan: Total water harvested capacity: 550.45 mcft

Enablers for Social, Economic and Environmental Development

Good Health & Wellbeing: Holistic Nutrition

- Hb test for women and adolescent girls: 5,369
- Malnutrition Screening for children: 8,585

Education

- Number of students covered through scholarships, online classes, quality education: 23,827
- Number of students covered through Learning and Migration programme (LAMP): 6,012

Clean Water and Sanitation

- Number of families supported with drinking water and toilets: 722
- Number of people supported with drinking water Swach Tarang: 6,780 (1,116 families with 54 Tech Jal)

Building Social Capital

- Number of women covered under empowerment programmes: 11,011
- Number of people covered under various AA programmes: 80,000+





Building Economic Capital

o promote livelihood opportunities and enhance the quality of life of the rural households dependent on agriculture, allied activities

and other non-agriculture based activities.

FARM BASED LIVELIHOOD (UNNATI)

- Agriculture Interventions
- Livestock Management
- Centre for Sustainable Agriculture & Farm Excellence (C-SAFE)

NON-FARM BASED LIVELIHOOD

- Skill Training programme (Badte Kadam)
- Cluster & Rural Enterprise Development
- Okhai Centre for Empowerment

FARM BASED LIVELIHOOD (UNNATI)

Agriculture and its allied activities have always been the backbone of India and its economy. In the current scenario, it is more important than ever to optimally utilise the limited resource that is our land. At the same time, the farmers are more dependent than ever on their plots of land for their livelihood, which needs to be protected. The opportunity lies in enhancing the land productivity for meeting the demand of the increasing population, which would help in creating sustainable income for the farmers. Under this programme, TCSRD focuses on enhancing farm productivity, agriculture development and improved returns from livestock management.

Agriculture Interventions

Enhancing agricultural production & return to farmers



Capacity Building Programmes

With the aim of enhancing farmers' skills and adding a scientific approach to their agricultural practices, TCSRD introduces new and improved agricultural practices, that are scientific and well-proven, based on the research and findings of agricultural institutions. The sensitisation for adoption of these new technologies is done by organising training programmes, participating in farmer fairs and exposure visits for farmers. The training sessions are organised with the help of agricultural experts from government agencies.

On-farm training of farmers at village level

On-farm training in various thematic areas serves as one of the most effective methods of information dissemination, which in turn helps farmers to consider, adopt, and practice various farm enhancement practices. This year, several virtual and field visit on-farm training sessions were conducted in collaboration with agri experts focusing upon pre and post knowledge and awareness about the latest seasonal crop practices, importance of soil health and water conservation in agriculture, diversification of cash crops, latest technology adaptation and

demonstrations of technologies, including Growcover technology promotion, organic farming, available government schemes for purchase of agriculture tools and planting materials, and awareness of livestock management. Training sessions related to the management of various diseases and pest management through integrated crop management were conducted. The training sessions were conducted by agricultural experts from TCSRD, KVK (Krishi Vigyan Kendra) and Rallis India Ltd.

OUTPUT Mithapur

- No. of farmers participated in training sessions: 585
- No. of training sessions conducted: 45

Uttar Pradesh

Farrukhabad (Amripur and Salenpur) & Hardoi (Shahabad)

- No. of farmers participated in training sessions: 309
- No. of training sessions conducted: 12
- No. of villages covered: 31

IMPACT Mithapur

 Increase in farmers' participation due to use of online services.

- Increased digital literacy among farmers, as well as the use of social media platforms for knowledge gathering and crosslearning with others.
- Increase in the yield quality (15% increase in yield). HH income has increased by 12%.

Farrukhabad:

- Farmers' participation and involvement has increased from 12-17%.
- Increase in the yield quality, HH income has increased by Rs.
 60,000 per HH. Increase in farm productivity by **17.5%.**

Exposure visits

Exposure visits provide a platform for farmers from different regions to interact and learn from each other. In addition, interaction with scientists and researchers gives them a technical understanding of agriculture and sensitises and encourages farmers towards integration of sustainable agricultural practices. Farmers are educated about soil improvement through the use of the proper quantity and quality of pesticides to overcome agricultural expenses. As per the need, discussions on the importance of water conservation by adopting a drip irrigation system



or the construction of farm ponds, as well as various demonstrations of units, horticultural methods, insect control and the use of fertilisers, to name a few, were also organised. This year we conducted exposure visits for the farmers wherein we touched upon various subjects, like scientific method of cultivation (date farm), marketing of horticulture crops like date farm and dragon fruits. This session helped the farmers to learn about the best practices followed, demonstrations of horticulture methods, water conservation methods, the effectiveness of new technologies, etc., thereby helping to save time, cost, energy, and manpower put into farming with better productivity. Visits to various places, like the Tissue Culture Laboratory at Mundra, KVK, and date palm cultivation farm visits of progressive farmers (3 farmers' farms) in Kutch district were organised for farmers from the Mithapur location following all the Covid-19 safety measures.

OUTPUT

Mithapur

Places visited: Anand, Mundra, Bhuj

- No. of farmers participated in the exposure visits: 70
- No. of exposure visits sessions conducted: 2
- No. of villages covered: 10
- Topics covered: Integrated Pest Management and High value horticulture crops.

Uttar Pradesh

Farrukhabad and Hardoi districts: (Field activities)

- No. of exposure visits: 8
- No. of farmers participated in exposure visits: 115
- No. of villages covered: **81**
- Topics covered: Demonstration of high yielding mustard seeds, high yielding quality mentha roots, enterprise model, sales and marketing knowledge.
- Institute visited: Sardar Vallabhbhai Patel University of Agriculture and Technology (Meerut), Chandra Shekhar Azad University of Agriculture & Technology (Kanpur), Directorate of Rapeseed Mustard Research (Bharatpur, Rajasthan) and Agriculture Research Centre.

Agriculture information centre (AIC)

TCSRD has started Agriculture Information Centres aimed at getting the right knowledge to farmers. In 2020-21, a total of 7 AICs were promoted, which facilitated 585 farmers. Demand collection for agriculture inputs and supply of the same were done through AICs, along with knowledge and extension services provided to the farmers. The AICs were enriched with various information, education and communication (IEC) materials for the dominant crops in the area as well.

Farm school

The farm school is jointly organised by ATMA. It's a half-day on-farm training programme on growcover and mulching technology. Farm schools were organised at the farm of one of the farmers in Vasai village to provide a live demonstration of growcover and mulching with drip irrigation and promote the intervention among the farmers. This helps to reduce pesticide usage by 50% and provides a better quality yield for farmers. Also, 70% of water is saved by drip irrigation and mulching methods.

Mithapur

- No. of farmers attended: **150**
- No. of farm school visit: 2

Agriculture technology park (Mithapur)

The Agriculture Technology Park was established on an area of 7acres of land with the purpose of envisaging the transfer of technology through live demonstrations. This helps the rural people in all aspects of life, such as capacity building, rural employment generation, and livelihood through agricultural practices and allied activities. The objectives of this initiative include live demonstrations/dissemination of cost-effective, local resource based, and environmentally friendly technologies of different agriculture technologies, providing functional exposure to replicated models meeting location-specific, season-specific and contextual needs, facilitating transfer of technologies to farmers from lab to land, demonstration of new & old agriculture technologies, and generation of direct and indirect employment opportunities. This year, virtual demonstration sessions on growcover, mulching, drip irrigation, rain pipe irrigation, promotion of a new pea variety (bayer 110), and mushroom cultivation (with 10 SHG members) were conducted.

OUTPUT

Mithapur

- No. of farmers attended: 56
- No. of villages covered: 8

IMPACT

 No. of farmers adopted the technologies demonstrated: 56

👼 Introducing New and innovative Agricultural Practices

TCSRD plays a proactive role in promoting new technologies and best practices in farming. These agricultural practices have a long-term impact, which includes increasing soil fertility and crop yield. From integrated pest management to new cultivation techniques, TCSRD has introduced a number of new agricultural practices during the year.

Practices for improving crop yield

High density planting system HDPS: (Mithapur)

TCSRD continued promoting the high density planting system (HDPS) by promoting early maturing cotton varieties which offer sustainable production and lower production costs. It also protects against low rainfall or erratic rainfall situations, as HDPS is supposed to be more productive, as 70% of the total production is harvested in the first two pickings. Along with this, the short duration of the crop reduces the chances of Pink Ball Worm (PBW) outbreaks to a minimum and the cost of chemicals, water and fertilisers. This also leads to a 28% higher yield compared to regular methods.

OUTPUT

- No. of farmers adopted HDPS: 210
- No. of varieties grown and names: Two varieties Ankur 2208 and Rasi Neo

IMPACT

Increase in yield: 28%

Horticulture Plantation:

(Mithapur)

The coastal region of Okhamandal is ideal for the cultivation of a

wide range of horticultural plants. Plants like coconuts and sapota are good for multiplier systems where farmers can grow multiple crops on the same land. To promote horticulture plantation and border plantation, TCSRD distributed plant saplings on a subsidy basis to encourage farmers to adopt horticulture crops. We have also started promotion of high value horticulture plants such as date farms, mangoes and dragon fruits. A total of 10,000 plant saplings were distributed to 276 farmers during the year, which would provide additional income to farmers.

System of wheat intensification (SWI): (Farrukhabad)

TCSRD promoted System of Wheat Intensification (SWI). Line sowing of wheat seed was done amongst 534 farmers in Uttar Pradesh to enhance the production of wheat, covering 972 acres of land.

IMPACT

Production increased: 12.23%

Promotion of crop rotation and cash crops:

Diversification of crops has been adopted for an all year-round utilisation of land, reduction in soil erosion and increase in soil fertility.

OUTPUT

(Mithapur diversification)

- No. of farmers supported with seeds (peas): 40
- Total acres of land cultivated by the farmers supported with seeds: 40

OUTPUT

(Farrukhabad)

No. of farmers supported with mustard seeds and mentha roots:

162 farmers

 Total acres of land cultivated by the farmers supported with seeds: 377

IMPACT

 Yield increased: 40% in case of Mustard crop and 18% in Mentha crop

New technology promotion:

TCSRD promoted Happy Seeder and Super Seeder after the paddy crop. Paddy crop residue is mixed into the soil to provide a safe ecosystem as compared to the smoke generated from paddy crop burning. Also, wheat is sown with fertiliser after the mixing process.

OUTPUT

- No. of farmers participated: **102**
- > Area covered: 223 acres

Mulching: After the sugarcane crop is harvested, the crop residue is mixed into the soil to increase the fertility of the soil using the organic material.

OUTPUT

- No. of farmers participated: **187**
- Area covered: 407.9 acres

IMPACT

Production increased: 14%



Crop demonstrations focusing on integrated pest management:

Crop demonstrations help in sharing and showcasing the results of successful adoption of new technologies. This encourages farmers to replicate the same model on their own agriculture land. Crop demonstrations were done in 206 demo plots during the last year and groundnut, cotton, and vegetables were cultivated across 206 acres of land. TCSRD introduced Integrated Pest Management (IPM), an ecologically based pest control system. The result of this was a high vield at a low cost of cultivation. This successful demonstration led to 340 farmers adopting the IPM system. With the use of biocontrols, the average cost of cultivation has been reduced by up to 16% and production has increased by up to 12% per acre.

Agricultural enterprises development (Farrukhabad)

Under this initiative, TCSRD provided the required training to farmers who were willing to take up the skill as a source of their livelihood. The trained farmers become agri-entrepreneurs by acquiring agricultural equipment and providing paid services to fellow farmers in their surrounding areas. TCSRD supported willing farmers to procure a list of agri-equipment at subsidised rates. Through the intervention, the availability of equipment has increased, while labour hiring costs have reduced. And with improved soil conditions, productivity has increased as well.

OUTPUT

- Number of Agri Entrepreneurs developed: 16
- Area covered: 43 villages

IMPACT

Production & Earning – Income

increased by Rs. 3,75,000/year

Solar electric fencing

TCSRD supported 55 farmers with solar electric fencing systems to protect their crops. The shock from the solar electric system is very low and is harmless to animals and people. It is an eco-friendly, lowmaintenance equipment. Under the initiative, a total of 450 acres of land is protected.

Zero tillage farming (Farrukhabad)

In Shahabad (Hardoi), TCSRD promoted zero tillage, in which wheat seeds are directly seeded without any intercultural crop residue, which helps to retain moisture and improve soil health by utilising organic material.

OUTPUT

- No of farmers participated: 83
- Villages covered: 07
- Area covered: **172.3** acres

OUTPUT

No. of crop demonstrations: 416

☆ Use of Information Technology

M-Krishi: M-Krishi is a mobileapp developed by TCS for disseminating agriculture- related information to farmers. The app provides real time information to farmers about the crops based on the location in a regional language. It provides a 'Package of Practices' about irrigation, application of fertilisers, market price of agricultural products and other information as required by farmers. The registered farmers received information about crop management through SMS.

OUTPUT

 No. of farmers from the Okhamandal region registered as members of M-Krishi till now: 2,200

institution Building and Market Linkage

Okhamandal Farmer Producer Company Limited (OFPCL): Okhamandal Farmer Producer Company Limited was set up with the objective of mobilising farmers in groups at the village level and establishing their associations (FPOs), strengthening farmers' capacity through agricultural, livestock management, and best practices for increased productivity, and facilitating access to fair and remunerative markets, including connecting producer groups to marketing opportunities through market aggregators and FOPs Governance.

OUTPUT

No. of farmers' meetings and

trainings: 59

- No. of farmers included in FPO: 214
- No. of villages covered: 8
- Sales: 1.62 cr
- Number of farmers included in FPO till now: 1,170

IMPACT

• 367 farmers benefitted through

institutionalisation, which reduced the input cost of crop cultivation by **15%** and increased the output income/profit of crops by **10%**.

Major achievements

- OFPCL purchased 3 acres land for processing unit setup.
- The soil testing lab was established.
- Linked 227 farmers with our Farm to Home initiative through OFPCL which showed way for a regular source of income and did business of Rs.16 lakh from this operation alone.
- OFPCL developed as the resource centre for the FPO development and process; Dhanvantari FPCL, Kesaria, and 3 FPOs from Banas, Patan, Halar FPCL, Khambhalia took training from OFPCL for process and operations.
- OFPCL shareholders increased to 1,170 with 120 women and 1,050 male members. Category General 85 + OBC 1,047 + SC 38 = 1,170 Total SH.
- OFPCL established:

 Agri Input Centre, 2) Farm
 Produce Procurement, 3) Gov.
 scheme linkages to more than 170
 farmers for various government
 schemes through i-Khedut Portal.
- In FY 2020-21, OFPCL crossed the turnover of Rs. 1.62 Cr in all business operations from Rs. 0.45 Cr (FY 2019-20), which is greater than 3 times compared to last FY 2019-20.



TCSRD institution building major achievements

- TCSRD selected for the farmers' training as trainers in 7 districts, out of which 5 trainings have already been completed in the district of Devbhumi Dwarka.
- In the tough time of COVID-19, farmers' trainings were provided through a digital platform that benefitted 520 farmers.
- For new FPO formation-Livestock & Fishery; Women & Devipujak community, reached 1,081 people (59 meetings) in 36 villages.
- Represented TCSRD at NABARD for the CBBO presentation and TCSRD was selected as the CBBO for the Jamnagar and Devbhumi Dwarka districts for the FPO Formation. Also got sanction for the FPO formation in Dhrol, Jamanagar with a fund of Rs. 25 lakh (5 years).

Farm to home

In the present situation, farmers in rural areas are struggling to find a market for their produce, and, in turn, earn sufficient income to support themselves and their families. In such a situation, it is more important than ever to link farmers directly to buyers, providing them with seamless access to a much larger market. OFPCL has initiated Farm to Home, a home delivery mobile application programme for the sale of vegetables, grains, dairy products, and fruits in and around Mithapur & Dwarka. This application can be used by farmers to list their produce, while buyers can use the application to purchase whatever goods they require.

OUTPUT

- No. of members added: 214
- Total no. of members till now: 1,170
- ▶ No. of villages covered: 8 villages
- Sales: Rs. 1,50,00,000

Livestock Management

Livestock is an important resource for households that depend on agriculture and allied activities. Diligent management of livestock can complement agricultural production and also supplement the household income. TCSRD has been carrying out interventions to enhance milk production of milch animals, reduce expenditure on animal healthcare by adopting preventive methods, and promote fodder development. The following are the focus areas of the programme undertaken at Mithapur.

Breed improvement

Artificial Insemination (AI) is an optimal way of improving cattle breed and enhancing milk



production. In Mithapur, TCSRD has established cluster-wise AI centres. AI centre is managed by paravet of TCSRD. AI centre is located at Vasai village, objective of the centre is to provide door to door services of AI for breed improvement, organise various health and treatment camps for animal health improvement, capacity building of farmers for fodder and cattle management and linkages with government schemes.

OUTPUT

 No. of animals covered under Al: 276

IMPACT

 Overall Breed quality improvement

Animal healthcare and vaccination

Vaccination is crucial to prevent diseases in cattle. Although cattle owners were aware of its importance, they were unable to vaccinate their animals because of poor access to government services. TCSRD runs vaccination camps at regular intervals at different locations. TCSRD also provides animal healthcare services through camps and OPD.

OUTPUT

 No. of cattle vaccinated for Foot and Mouth disease (FMD) and Haemorrhagic Septicaemia (HS): 12,000

IMPACT

 FMD diseases impact milk production of cattle. To prevent such loss FMD vaccination is very important. There is a reduction in mortality rate and retaining of the milk productivity rate.

Deworming

Deworming is of utmost importance for preserving cattle health since worm infestation can lead to diarrhoea and other serious health problems.

OUTPUT

No. of animals (including camels, sheep and goats)

covered under deworming : **52,768**

IMPACT

 Deworming helps to keep livestock healthy and support the good milk production. It prevents the infection of internal and external parasites in animals.

Balanced nutrition

Green fodder is a cost-effective feed supplement for cattle. Feeding of green fodder like barseem, oats and makhhan grass increases milk production, butterfat content and helps the cattle digest its food better.

OUTPUT

- ▶ Increase in milk production: 4%
- No. of HH supported with healthy feeds for their cattle: 298 HHs

Enterprise development

As an alternate source of livelihood, where agriculture has limited scope fisheries enterprises were developed to enable livelihood opportunities to the landless farmers. During the year, 11 farmers from 11 villages were provided with fish seedlings of Indian, sweet water carp, rohu and catla.

OUTPUT

- Number of enterprises developed: 11
- No. of fish fingerlings distributed: 10 lakhs

Livestock management training

A one day virtual training programme was organised by Krishi Vigyan Kendra. During the year, 18 animal husbandry trainings with 238 farmers were organised.

Centre of Excellence for Sustainable Agriculture and Farm Excellence (C-SAFE)

C-SAFE (Centre of Excellence for Sustainable Agriculture & Farm Excellence) was launched to celebrate the 150 years of Tata Group. The activities which commenced in 2019 are aimed towards a singular goal to experiment, pilot, establish and advocate SAFE models for driving value, safe environment, safe food creation.

It focuses on enhancing prosperity for small and marginal farmers working along Farmer Producer Companies. This helps farmers adopt sustainable agricultural practices coupled with value addition through technical guidance at a field level, resulting in optimised cost of cultivation and producing improved quality farm product fetching higher market realisation. It also unlocks value and establishes a sustainable business model for Farmer Producer Companies (FPC). All value chain programmes are driven by the C-SAFE ABC value chain model- Agronomy, By-Products, and Consumers.

Agronomy focuses on yield improvement, quality enhancement, and cost optimisation by introducing scientific and effective farm practices. By-Products focuses on the sorting, grading and processing of the produce to obtain maximum value. The Consumer aspect focuses on connecting farmers with end consumers through FPCs ensuring safe and nutritious products straight from farms to consumers. Programmes under C-SAFE in FY21:

Tomato value chain project – Hosur

After the successful completion of C-SAFE Tomato project in Mandya, the project is being executed on 98 acres with two varieties SHIVAM and SAAHO. During the project field team has continuously monitored the field activities, giving regular guidance to farmers on each and every critical activity which has been digitally tracked through a digital app.

OUTPUT

- No. of farmers included: **98**
- No. of villages: 4
- No of acres covered: 98

IMPACT

- Farmer followed recommended package of practices: 61%
- Farmer yield improvement per acre: 4 to 5 Mt
- Improvement in A grade quality:
 2 to 3 Mt
- Farmer digitisation success: 68%
- Advocacy and skill building on group farming, farmers are establishing FPC to reach out maximum number of marketers

Tomato value chain project – Nashik

Tomato crops require intense agronomical intervention with a large number of agri inputs. A group of 340 farmers were chosen for this pilot linked to Saptasurangi Farmer Producer Company based in Dindori, Nashik district.

Experiment done with a weather-based insurance model

When it comes to tomato farming, there is a lot of uncertainty in terms of the yield and farmer income. To mitigate this risk, C-SAFE experimented with an innovative weather-based insurance product, which triggered claims and resulted in timely payouts to the farmers.

OUTPUT

- No. of farmers included in FPC: 370
- No. of villages: **11**
- No of acres covered: 500

IMPACT

- Farmer followed recommended package of practices: 77%
- Farmer yield improvement per acre: 5 to 6 Mt
- Improvement in A grade quality:
 2 to 2.5 Mt
- FPC got market linkage for processing grade tomatoes

Paddy value chain project

Buoyed by the confidence derived from the summer project, this was scaled up in Kharif to 1500 acres with 453 farmers of Chauras FPC working on two varieties RNR 15048 and Jaiprakash (Fine). As the next step forward, Chauras plans to sell rice in a branded form to unlock maximum value.

C-SAFE also experimented yieldbased insurance product to advocate farmers on crop insurance which too triggered claims particularly for the flood affected farmers.

OUTPUT

- No. of farmers included in FPC: 453
- No. of villages: 14
- No of acres covered: 1,500

IMPACT

- Yield improvement by 4 qtl per acre
- Farmer saved input costs
- Farmer gate procurement by FPC saved transportation cost
- Finance and warehouse linkage to FPC

	Building Economic Capital- Agriculture Growth Pro	ogramme	
	Intervention	Year 20-21	Cumulative
88	Farmers Training & Capacity Building		
187	Training to farmers		
	Mithapur		
	No. of training sessions	45	24,941
	No. of farmers covered	585	25,481
	Farrukhabad		
	No. of farmers covered	309	2,970
	Kisan Mela	154	1,084
	No. of farmers covered - Farrukhabad		
	Exposure Visits		
	Mithapur No. of visits	2	2
	No. of farmers Farrukhabad	2	2
	No. of visits	6	
	No. of farmers	115	316
	Introducing New and Innovative Agricultural Practices		
	No. of farmers adopted HDPS - Mithapur	210	484
	Changing cropping pattern (in acres) - Mithapur	206	6,231
(<u>¥</u> ¥)	Acres covered under promotion of new technology - Farrukhabad	972.1	4936.5
	No. of farmers adopted new technology - Farrukhabad	524	524
	Distribution of horticulture plants		
	No. of plants - Mithapur	10,000	20,800
	No. of farmers supported with horticulture plants - Mithapur	276	614
	Use of Information Technology		
	No. of farmers covered under mobile-based agriculture information - Mithapur	2,200	2,200
	Institution Building and Market Linkage		
	No. of farmers included - FPO	214	1,170
	No. of villages covered - Mithapur	8	38
_	Sales	Rs. 157 (1 Crore 57 lakhs)	Rs. 202 (2 Crore 2 lakhs)
A	Diversification of Cash Crops (in acres) - Farrukhabad	377	515
	Impact Indicators		
	Average increase in income of farmers (yearly) - Mithapur	15%	15%
	No. of Agri Enterprises developed -Farrukhabad	16	81
	No. of farmers who have adopted the practices - HDPS, IPM., Laser leveling, Drip & Sprinkler irrigation (other than direct beneficiaries)	340	340
	% Increase in crop production - Mithapur	12	12

		Livestock Development Program	mme-Mithapur		
			Measurement Unit	Year 20-21	Cumulative
	Animal Health Care & Vaccination	No. of animals covered in FMD vaccination camps	Animals	12,000	12,000
		No. of animals covered in animal health camps	Animals	304	304
		No. of small animals covered in deworming camps	Small Animals	52,768	52,768
E BER	Breed Improvement	No. of cows & buffaloes inseminated through high quality semen	Cows / Buffaloes	276	276
		No. of cows & buffaloes inseminated through high quality semen	Cows / Buffaloes	276	276
	Balance Nutrition	No. of cattle owners covered in Lucerne & Barseem seed distribution	Cattle Owners	298	298
		No. of cattle owners covered in Nepiar Grass demonstration	Cattle Owners	12	12
	Small Enterprises Development	No. of small fishing unit established	No. of Unit	11	11
×	Impact Indicators	No. of animals examined & treated in a year	Animals	53,579	53,579
		No. of cattle owners covered in a year	Cattle Owners	164	164
			Cattle Owners	164	164

	Livestock Development Programme-West Bengal			
703		Year 20-21	Cumulative	
5 - tet	Fish Farming	50	250	
	Poultry Farming	20	370	
KI	Goat Farming	20	110	

NON- FARM BASED LIVELIHOOD PROGRAMME

Non-farm based livelihood interventions focus on training and education of the rural population giving them the skills and confidence needed to explore different areas of employment, while also generating alternative or additional livelihood through non-farm activities. Under this theme the programmes are as follows:

N<u>é</u>s

Skill Development Programme (Badte Kadam)



Okhai Centre for Empowerment and Market Linkage

🎢 Skill Development Programme (Badte Kadam)

The employment disparity in our nation has been a huge challenge to economic growth in the rural areas - especially because of low rainfall and unavailability of groundwater that limits agriculture and reduced demand for a workforce for agriculture and related activities. This in turn has led to migration of unemployed rural youth to cities where they fall prey to low-wage employment jobs. It is important that employment is generated in rural areas or the youth are trained to acquire new skills so that they get meaningful employment locally or in nearby towns and cities.

To achieve this goal, TCSRD conducts various skill development interventions with an aim to provide employable skills to rural youth, providing a platform to generate employment and/ or enterprise. Based on an assessment of local needs and opportunities, skills are identified.

TCSRD has its own skill development centre in Mithapur (Gujarat) with advanced training, equipment and teachers. TCSRD also conducts programmes for youth around its location at Mambattu and Cuddalore. TCSRD also partners with external organisations like Tata Strive, L&T Construction Training Institute, etc. for conducting other training programmes. The 2 skills training centres in Maharashtra, are run in collaboration with Rallis having Light of Life Trust (LOLT) as a partner organisation. In addition, partnered with 2 ITIs' (Industrial Training Institute) one from Gujarat and one from Maharashtra.

Linkage is established with industries, private and government agencies for employment and entrepreneurship to ensure sustainable income.

Last year during the pandemic, to ensure continuity of skill training, TCSRD conducted digital programmes in addition to physical modules. In 2020-21, the intervention was conducted in Mithapur, Mambattu, Cuddalore Dahej in Gujarat, Akola and Dhasai, in Maharashtra. Training was imparted to the youth through the following initiatives:

Technical Training Institute & Skill Development Centre

Technical Training Institute was inaugurated in 2019 with the introduction of six different trades - Welder Technician, Fitter Technician, Domestic Electrician, Fashion & Technology, Beauty & Wellness and Computer Technology, with courses comprising modules of six months. The primary aim of the institute is to generate quality manpower for different sectors.

Under the skill development programme, a satellite branch was set up at Dwarka offering 2 basic courses tailoring and beauty & wellness, which has been managed by 5 SHG members from different groups.

To help students enroll, awareness campaigns are run in nearby villages about technical courses and counselling of students who are willing to join the institute is done according to their education criterion that is Std 8th pass and potential towards the course. The training includes motivational training, 5S training, fire and safety awareness, technical and theory portion of the course and EDP (Entrepreneurship Development Programme). The process is followed by monthly exams for each course. The final assessment is done in three stages - first by an internal agency, then by an external



agency and finally by the Sector Skill Council. After the assessments, the students who pass are offered jobs through campus drives conducted at the institute for which different sector-related industries are invited. Internal assessment is done by the internal teaching staff while the certification is provided by TCSRD. After certification, the beneficiaries are guided and provided help in setting up their enterprises by linking them up with banks.

During the year, 40 students of Okhamandal block were given training for a competitive test which is compulsory for Government job deputation at TTI Mithapur.

OUTPUT

- Number of students trained in Mithapur: 480
- Number of students placed in Mithapur: 336
- Number of students placed through placement cell: 497
- Dwarkesh Foods foundation an enterprise by 10 women at Dwarka.
- 14 candidates of fashion & technology started their home enterprise by producing PPE's, mask and school uniform.
- 16 candidates from beauty & wellness started their own enterprise in Okhamandal.

IMPACT

 Average annual income of students trained and placed: Rs. 9,800/-

SAKSHAM programme

SAKSHAM, an initiative by TCSRD and NABARD (NABSKILL), aims to make the youth of Okhamandal employment-ready, and prepares them to become entrepreneurs. As part of this programme, 9 new short-term courses were introduced in fields which have a huge demand in the local market. This includes CCTV Surveillance Systems, Driving, Hospitality Management, Electric Motor Rewinding and Repair Services, Call Centre Training, Machine & Quality Technician (Turner), Fitter Fabrication, Welding & Fabrication, and Forklift Operator. Of these the driving and forklift courses were offered only for women trainees. A total of 160 youth were trained under the Saksham training programme. Out of 160, 93 students have been placed and some have started their own enterprise.

OUTPUT

- 'Madhav Enterprise' is an enterprise set up by 14 youths of CCTV installation at Mithapur.
- "Maa Enterprise" was set up by 12 candidates of forklift and had agreement of forklift supply at Tata Chemicals Ltd., Mithapur.
- 15 candidates from call centre training are placed at Connect Business Solutions Pvt. Ltd, Mithapur.
- 5 candidates from Hospitality training started their enterprise and 7 are working with various hotels at Dwarka. 14 candidates from welder training are placed with different contractors at Mithapur & Dwarka and 1 candidate started their own enterprise.
- ▶ 12 candidates of Fitter training are placed at different contractors at TCL as well as industrial areas.
- ▶ 8 candidates of motor rewinding

training are placed at Dwarka.

▶ 5 candidates of driving training have been shortlisted to start their own enterprise at Dwarka in partnership with Atul Motors Pvt. Ltd.

Outbound trainings

Under the skill development intervention, TCSRD offers training through partners throughout Gujarat, which include - L&T Constructions, Ambuja Cement Foundation, Dhanakshi Academy For Inspired Learning Pvt. Ltd. (Ahmedabad) and Industrial Fire & Safety Institute. Through this initiative, both short-term and longterm courses are offered that cover a wide variety of competencies, including AOCP, construction electrician, bar bending, diploma in fire & safety, motor mechanic and nursing assistant. The partnerships are formed with the assistance of MOU, and TCSRD ensures employment through 100 per cent placement assurance. The training provided includes motivational training, theory and practical of course as well as EDP training certification.

OUTPUT

- No. of youth enrolled for nursing assistant training (an outbound training module linked with SEDI (Skill & Entrepreneurship Development Institutes) –an initiative of the Ambuja Cement Foundation)- 21 students (Location- Kodinar, Gujarat)
- Training duration: 4 months of classroom teaching followed by 2 months of on-the-job training.
- No. of youth placed: Training is in process: 21

IMPACT

- Average Income of the youth placed (Yearly): Rs. 10,500.00
- Average increase in HH income

(Yearly): Rs. **7,500** to Rs. **9,800** per month.

Recruitment drives

Under skill development intervention, a placement cell is operated for Devbhumi Dwarka district, which is linked with all the SEZs of Gujarat, generating an average 5,500 plus vacancies throughout Gujarat for different sectors. Students are allowed to register themselves through an online portal as well as the android application free of cost. Registration is also free for the industries to post their vacancies on the portal as well the mobile app. Campus drives are also organised every three months for the candidates who have passed out from TTI, ITI's and local youth seeking for jobs, with the assistance of ITI of Devbhumi Dwarka district, which includes Dwarka ITI, Kalyanpur ITI and Khambhalia ITI.

OUTPUT

- No. students registered themselves for jobs through an online portal as well as android application: 1,173
- No. of companies posted jobs:
 9 industries
- No. of students placed: 833

IMPACT

 Average salary of the students placed: Rs. 9,000 to Rs. 11,000/-

TaRa- skill development programme

Special emphasis has been given to women while designing and implementing various CSR initiatives. The skill intervention in Maharashtra is named as TaRa - an acronym for Tata Rallis.

Dhasai training centre

Since March 2019, under TaRa, skill training programmes were initiated at a village near Mumbai, called Dhasai in partnership with Light of Life Trust (LOLT). This centre imparts various skills to students and women in Tailoring, Beautician, Backyard poultry, Goat rearing, Computer, Business planning, Spoken English, as well as short term courses like jewelry making, toran making and mehendi.

The partner NGO follows-up with pass-out students and visits their homes to support them in the employability process and ensure the majority of pass outs are gainfully engaged. Seeing the impact of the programme, the process of replicating the same model has been initiated in Akola.

ITI partnership

To inculcate industry responsive skill development through activities, TCSRD in collaboration with Rallis has partnered with 2 ITIs, one from Gujarat and one from Maharashtra, Waghra ITI and Akola Girls ITI.

Objectives of ITI partnership:

- Organising soft skill and safety training for ITI trainees.
- Capacity building training for ITI trainers.
- Organising guest lecture / expert lectures for trainees.
- As and when required feasible support for infrastructure / materials required by various trades in ITI.

To encourage girls and women to be financially independent, starter kits were provided to those who are graduates from Skill training centres and ITI - which help the graduates get started on the path to self-employment.

OUTPUT

 Enrolled **796** trainees, out of them **591** completed the course.
 From the total pass out **39%** are gainfully engaged and **37%** have enrolled for further education

Tata Strive Centre, Aligarh

TCSRD in partnership with Tata Community Initiatives Trust (TCIT) is working on skilling underprivileged youth since the inception of the first Tata Strive Skill Development Centre in Aligarh in 2015. The purpose of creating a dedicated Tata Strive Skill Development Centre (TSSDC) in Aligarh was to provide a learning experience that enhances not only the domain skills but also ensures holistic development of underprivileged youth.

The objectives of this partnership are:

- Implementation of skill development programme in industry-specific trades for youth from socially and economically marginalised communities especially in locations like Uttar Pradesh.
- 2. Transformation of youth into an employee/entrepreneur through behaviour change, knowledge acquisition and skill development through the Youth Development Module (YDM) and Youth Development Score Card (YDSC) App developed under the partnership.

All technical courses are offered in

a blended model. While they cater to both - IT domain (classroom and practical) and life skills needed for workplace (Tata STRIVE Youth Development Module - YDM), the learners are able to experience a blend of instructor led online learning, work done in labs in the centre, various sessions in classroom facilitated by trained facilitators and self-paced modules too. Given the current situation due to the Covid-19 pandemic, there is flexibility in the plans, catering to the norms laid down by the authorities and prevailing best practices to ensure safety of our learners and employees.

OUTPUT

- No. of youth trained: **347**
- No. of youth placed: 225
- No. of female youth completed training: 67
- ▶ % of SC/ST/OBC category youth

completed training: 64%.

IMPACT

- Out of 225 placed, the average yearly incomes of 71% of learners have increased.
- 347 youth trained have undergone YDM across which includes behaviour change in a learner.

Cuddalore & Mambattu

Eureka Forbes training: TCSRD signed a MoU with ESSCI (Electronics Sector Skills Council of India) for skill development of youth. As a pilot we have decided to start the first programme for youth of Mambattu & Cuddalore locations. The training was conducted online and through virtual lab. It started on 7th January 2021 covering 30 youths. The duration of the training in total is 45 hrs. The training was conducted by ESSCI & Eureka Forbes.

Objective

- Skill development of youth to create employability skills and better livelihood opportunities.
- To develop understanding of rural youth for troubleshooting of Eureka Forbes RO units through virtual lab.
- To develop understanding of rural youth on customer handling.

OUTPUT

- No. of youth participated: **30**
- Out of 30, 24 youth cleared the assessment.

IMPACT

 One youth currently working with Eureka Forbes & getting a package of around 1.5 lakh annually.

Building Economic Capital- Skill Development -	Mithapur, Mambatt	u and Cuddalore
	Year 20-21	Cumulative
No. of youth provided vocational training - Mithapur	480	7,336
No. of youth provided training - Cuddalore	20	70
No. of youth provided training - Mambattu	10	10
No. of youth provided training - Aligarh	347	1,258
No. of youth placed - Mithapur (Employment + Entrepreneurs)	833	833
No. of youth placed - Cuddalore (Employment + Entrepreneurs)	1	1
No. of youth placed - Aligarh	171	1,050
Impact Indicators		
Average monthly salary - Cuddalore	Rs. 10,000	Rs. 10,000
Average monthly salary - Aligarh	Rs. 11,500	Rs. 21,168
Training completed (No. of youth)	347	1,258

Building Economic Capital- Skill Dev	velopment - TaR	Ra
No. of youth / women enrolled for training at Skill centre	Year 20-21 348	Cumulative 348
No. of youth provided training via ITI	448	448
No. of youth/women completed training at Skill centre	10	10
No. of youth/women gainfully engaged (Employment / Self-employment/further education) ITI+ Women provided training at Skill centre	309	309
Impact Indicators		
Average earning monthly (beneficiary)	3,171	3,171
No. of Starter kits provided (ITI +Skill training women) poultry, beautician, bakery, tailoring depending upon the trait they are provided with starter kit to start a business	142	142
% AA covered from Skill training and ITI	30.1	30.1

$arsigma^{\mathcal{D}}$ Cluster & Rural Enterprise Development

The Cluster & Rural Enterprise Development Programme of TCSRD was initiated in 2003-04, with the objective of developing skills and empowering the rural youth to pursue self-employment by initiating small enterprises. With low rainfall and unavailability of ground water limiting agriculture, the programme worked towards alleviating poverty by providing women with another means of livelihood.

The Rural Entrepreneurship Development Programme (REDP) helps individuals and self-help group (SHG) clusters set up enterprises. The aim is to enhance the entrepreneurship qualities and skills in the target population and thereby ensure growth of enterprises. TCSRD has partnered with GRIMCO , Gram Technology NABARD, DRDA, DIC and other government programmes to help establish and support such SHG clusters. These include the leather and rexene cluster, as well as other clusters such as the bandhani, block print, bead, jute, clay work, coconut fiber artisan group and paper clusters.

How each cluster works

Step 1: Creating each cluster by spreading awareness and capacity building.

Step 2: Providing REDP and technical training.

Step 3: Creating a cluster production plan which includes purchase of raw materials, production planning and creating the product.

Step 4: Providing market linkages and promoting sales through shops, local markets, exhibitions, bulk order, government and new market linkages.

REDP and Technical Training

During the year, two groups were

provided with REDP & Technical training at Poshitra village. One of the groups was provided with Karzobi Technical Training & another group was provided with Kantha work. The process of formation of 2 new clusters - Karzobi & Kantha work was completed, engaging 22 women. In addition, during the pandemic, due to increased demand for masks, a new group for Mask production was formed with 47 women.

During the year, two workshops were organised by TCSRD for all cluster members.

The objectives of the workshop were:

- Integration of all clusters
- Integration through Innovation and value addition in all clusters products

It included content on five

Is - Introduction, Integration, Innovation, Implementation and Impact.

OUTPUT Cluster

- Total Number of women provided with REDP and Technical training: 94
- Total new members (women) added to the clusters: 45
- Cumulative: 255 women are part of the clusters
- Total sales this year: 16 lakh
- Total beneficiaries average income per month: 7.49 earnings per month

MASK PRODUCTION

- Total sale of masks: 6.87 lakh
- No. of women involved in mask



production: **40**

- Per woman income for 1 time only: Rs. 4500
- Total average earnings annually provided: Rs 1.80 lakh

IMPACT

 During the shut down due to the pandemic, the women continued to earn money through production and sale of masks, bandhani job work and other job work orders.

		Cluster-wise income and sales	
	Name of cluster	Income	Total selling for the year 2020-2021 in Rs.
	Dr. Bhimrao Ramji Ambedkar - rexene cluster	Total average annual earnings: Rs. 22,975 Per month per beneficiary income: Rs. 225	1,70,540
·>>XX	Saptrangi bandhani cluster	Total average annual earnings: Rs. 2,40,000 Per month per beneficiary income: Rs. 1,951	2,15,000
A BOOM	Fashion girl bead cluster	Total average annual earnings: Rs. 19,000 Per month per beneficiary income: Rs. 175	19,000
	Style jute cluster	Total average annual earnings: Rs. 1,80,000 Per month per beneficiary income: Rs. 1,238	3,00,995
e constante a cons	Siddhivinayak coconut cluster	Total average annual earnings: Rs. 36,000 Per month per beneficiary income: Rs 270	1,04,340
	Patch work cluster	Total average annual earnings: Rs. 11,000 Per month per beneficiary income: Rs. 102	14,500
	Dungaree cluster	Total average annual earnings: Rs. 40,000 Per month per beneficiary income: Rs. 333	40,000
\$	Continuation in Covid-19 Situation		6,87,000

Note: (Due to the lock down for managing the COVID-19 pandemic, the production, sale and beneficiary income are estimates). * Mask selling total 6.87 lakhs

** Karzobi & Kantha work training was done, production continued, but the selling hasn't been done due to the pandemic.

🛞 Okhai Centre for Empowerment

The Okhai Centre for Empowerment was set up by TCSRD in partnership with Tata Chemicals. Okhai, as a social enterprise, was the outcome of TCSRD's successful handicrafts development programme that helped the tribal artisans of the Okhamandal region that included communities such as Rabaris, Vaghers and Ahirs.

In the absence of any other significant income earning opportunity for the rural women of the region, it became imperative to provide them with a source of livelihood. TCSRD, through Okhai, provided these women with the opportunity to earn for them and be economically and socially independent.

Women of the self-help groups (SHGs) are trained in methods of modern handicraft production. Special training on skill development, design, costing and visual merchandising is also provided.

The programme that started from Mithapur (Gujarat), has been scaled up in other states of India including Uttar Pradesh, Rajasthan, West Bengal, Maharashtra and the North East. Okhai has worked as a bridge between the artisans and the customers for scaling up the sale of their handicraft products by understanding customer needs, manufacturing the products with the help of the artisans and facilitating sales through the Okhai website and its sales outlets.

During the pandemic, to ensure livelihood for rural artisans across the country, Okhai transformed to a marketplace.

Following interventions were done to support the artisans to sell their products during the pandemic.

Launch of artisan support helpline number

Okhai launched a helpline for artisans across the most remote parts of India, to extend Okhai's support to all artisans at the grassroots who are using traditional techniques to create apparel, home decor products or accessories, and more. Okhai's fundamental objective to launch this helpline was to reach out to the tribal and rural artisans in India and help them become independent and self-



reliant. The support for grievances will be provided in collaboration with the Creative Dignity group of volunteers supporting the crafts industry.

Around 33 calls were received on artisan helpline and we supported five of them.

Partner interventions

- a. Virtual Training Sessions The Okhai Operation team conducted various virtual training sessions. This includes one with artisans from Mundra (Kutch) for developing a Kutch collection of apparel, and another virtual crochet training session with artisans from Dhaga (Maharashtra). Okhai also placed orders with these artisans.
- b. Design for Good

Okhai is working with Mahila Umang artisans on a collection of cotton yarn knitwear for the entire year. This is the first time these artisans are working with non-woollen yarn and creating an entire collection other than winter wear. This adds an entirely new product and an extended skillset to their range of work, helping 700 artisans.

- c. **Mithapur Coconut Cluster** Okhai assisted Coconut cluster artisans at Mithapur in designing coconut fibre planters, and these products will be sold through the Okhai platform very soon.
- d. Collaboration with Porgai-Lambadi Tribe

Okhai assisted the Porgai-Lambadi Tribe in their latest initiative - Covida Rag Dolls that uses fabric waste. Okhai is also in the process of developing a collaborative collection with the tribe.

Key achievements

 The Okhai Flagship Store was launched in Mumbai in October, 2020.

IMPACT

- During the year, **313** newly designed products were launched online and sales increased by **68%** in the last year.
- Through Okhai, the artisans earn between Rs. 5,000 to Rs.

15,000 every month.

 In addition, Okhai is now being recognised as a Sustainable Online Fashion Brand, with over 2,00,000 online followers and 73,582 online customers.

	Building Economi	c Capital - Okhai		
	Description	Year 20-21	Cumulative	
(K3)	Sales amount (lakhs)	1,057.1	2,988.25	
2	No. of artisans impacted	25,190	27,534	
, eg	No. of new artisans recruited	25,190	27,534	
	Average beneficiary payment (per artisan)	7,851	11,575	
①\$	Impact indicators			
	Increase in Household income (Avg %)	83%	110%	

CASE STUDY

Name of the Intervention: Nursery and Seedling Production Name of the Beneficiary: Jagdish Manek Location: Gadhechi, Okhamandal

Jagdish Manek, a young 21-year-old farmer, is full of passion and vision to create something new. He owns 9 acres of land in Gadhechi village, which is very fertile with great availability of water. However, the yield of his farm was very less compared to similar farms in the area.



As a member of Ashapura Farmers Group formed by TCSRD in Gadhechi village, he participated in the training programme on the production technology of vegetables. Here, he learned about the importance of healthy seeds and seedlings in the production of vegetables.

After the training, Jagdish decided to adopt the plug nursery for vegetable seedling for which TCSRD helped him in preparation and planning - providing technical support, as well as support for the purchase of Agro Nets and Seedling trays.

In the first batch of production Jagdish prepared 20000 seedlings of chili and tomato, after the transplanting of which he received early fruiting, as well as 12% more production per acre.

He also expanded the structure of his nursery, which helped him produce more seedlings of vegetables for the other farmers. In 2020, he sold more than Rs. 2 lakhs worth of seedlings to farmers in the Okhamandal area. Agriculture is now his primary source of income, and the income generated by agriculture is far higher than what he was making previously.

Ensuring Environmental Integrity

ur main focus is on Natural Resource Management & Environmental Conservation. Key programmes include land and water management activities, waste management, and preservation of biodiversity and mitigation of climate change impacts. The programmes are designed with a participatory approach along with inclusion of other partners

who provide skills, knowledge, expertise and funds to enhance



NATURAL RESOURCE MANAGEMENT

- Watershed development and Water management (Jal Dhan)
- Soil and Land improvement
- Waste Management

the effort and reach a larger number of people.



BIODIVERSITY CONSERVATION

 Centre for Sustainable Conservation Action for Protection of Ecosystems of the Seas (C-SCAPES)

Natural Resource Management

Jal Dhan - Integrated Watershed Development and Water Management

TCSRD implemented water conservation and water management work across villages in rural India.

Several water harvesting structures were done during the year:

Community water harvesting structures

Community water harvesting structures are constructed with community participation, collection of community contribution, formation of user groups, implementation of participatory approach, selection of panchayat members etc.

Individual water harvesting structures

Farmers also harvest water



individually on their farmlands by digging farm ponds and farm bunds and taking up ground water recharge through wells. The direct benefit are as follows:

- An increase in water storage capacity that can be used for agricultural activities and critical irrigation
- Fertile soil that is dug out is utilised in their farm for land reclamation, which leads to increased production
- Stones are used for building farm boundaries to protect crops from wild and stray animals
- There is a reduction in salinity
- Increase in water table of surrounding area

Promotion of micro irrigation system (MIS):

To address the challenge of low water availability and increase the water use efficiency, along with the development of the water resources, promotion of micro irrigation systems (MIS) like drip and sprinkler irrigation systems are carried out. Training on fertigation practices is provided to the farmers. The adoption of water management practices leads to increase in water efficiency, reduces the labour cost, enhances the productivity of the crop and ensures the judicious use of fertilisers.

For scaling up of adoption of MIS, an additional 20% subsidy was provided to farmers of project villages. During the project period **155** farmers adopted MIS and increased water efficiency by **70%** through drip and **40%** through sprinkler irrigation.

Promotion of rain gun irrigation system:

Rain Gun irrigation system is a fast and cheap method of irrigation in comparison to sprinkler and drip irrigation systems. Even small land holders and farmers can afford this system. It requires very low maintenance and has lesser choking issues compared to drip irrigation methods. Rain gun was demonstrated to **108** farmers in **8** villages of Okhamandal taluka.

Impact Water conservation-Mithapur

- Average water saving of 40% and yield increased upto 15%
- Around 81 farmers were benefitted, with a total agricultural area of around 210 acres, owing to 81 farm ponds

and 11 village ponds, dams, and check dams, as well as a 20 mcft increase in water storage

- The annual storage of 421 mcft of water in 13,000 acres of agricultural land and irrigation of various crops yields a benefit of Rs. 2,105 lakhs to farmers and other people
- Individual water harvesting structures were built by digging 1,60,000 cubic metres of soil, and 205 farmers increased the fertility of the land by adding good fertile soil in 1280 bighas, saving Rs. 45.00 lakhs at 3,500 per bigha, which could only be done with public participation
- In villages like Samlasar, Poshitra, Mulvel, Khatumba, Charkala, Pindara, Gurgath and Gaga, rain water is stored in farm ponds

Jal Dhan – Maharashtra (Latur, Beed, Ratnagiri, and Akola)

Jal Dhan programme in Maharashtra is carried out in collaboration with Rallis with special focus on water stressed regions. The programme aims at increasing water availability for domestic and Agri use through watershed interventions. Jal Dhan works towards reducing force of run-off rainwater, recharging the aquifer and constructing water storage and recharge infrastructure. The watershed component is focused on constructing various temporary and permanent structures like loose boulder, diversion dam, check dam, recharging ground water level, afforestation etc.

Challenges faced

Jal Dhan project has faced many challenges, few of these are mentioned below: 1. Gaining confidence and developing trust among the villagers in the initial phase is always very difficult 2. Group dynamics in the village due to political issues or personal preferences cause work to be delayed 3. Villagers are not ready to believe in the mode of operandi of the programme. It takes time to make them understand our walk the talk approach 4. Getting support from the

government for said work has always been challenging.

OUTPUT

- The programme has made positive impact to more than
 2,21,700 villagers through its Jal Dhan programme
- Jal Dhan has spread to 70 villages covering 19 tehsil and 8 districts of Maharashtra
- Impact assessments of 10 villages from Latur tehsil were conducted in FY21

IMPACT

- Harvested 3.08 MCM water
- Villages free from water tankers for entire year.
- Family income doubled due to increase in crop production
- Migration stopped as work available in village for entire year
- Women saved from drudgery and also there was saving in energy and time consumed to fetch water
- Farmers opted for second and third crop due to water availability
- Ground water level increased from 600 feet to 400 to 300 feet, well, tube-wells and borewells recharged
- After seeing the impact of Jal Dhan, neighbouring villages are now approaching to initiate the same project in a similar manner in their villages.

(Water Conservation & Management- Mithapur & Maharashtra		
	Intervention	Year 20-21	Cumulative
	No. of medium water harvesting structures constructed- Mithapur	11	386
	No. of medium water harvesting structures constructed- Maharashtra	11	11
*	No. of drip and sprinkler installed-Mithapur	77	894
R	Area covered under micro irrigation (in acres)-Mithapur	188	3,945.50
· S	Area covered under irrigation through medium and small structures (in acres) - Mithapur	780	14,071
	Number of Farmers covered under watershed management programme-Mithapur	312	5,600
	Impact indicators		
	Rain water harvesting capacity added (mcft)- Mithapur	20	441.75
	Rain water harvested added (mcft)-Maharashtra	6.25 km nala desilting	3.08 MCM
	Number of farmers covered under watershed management programme	312	5,600

Soil and Land Improvement

Land development programme: Under land development a number of activities are taken up, which include the following:

Laser levelling

Laser levelling of agricultural land is a resource conservation technology that saves irrigation water, nutrients and agro-chemicals. It also enhances the environment quality and crop yield.

In 2020-21, total 131 acres of land were levelled by laser levelling in Mithapur and 633.60 acres in Farrukhabad that benefitted 18 farmers in Mithapur and 458 farmers (100 villages) in Farrukhabad.

Deep ploughing

Under this initiative, the hardcrusted upper layer of the soil is ruptured. This paves the way for plant roots to tap into the moisture within the soil below.

During the year, over 200 acres of land was reclaimed in Mithapur and 633.60 acres was deep ploughed in Farrukhabad, benefitting 458 farmers from 100 villages.

Gypsum application

The soil of the Okhamandal region is saline and at the same time it has a poor drainage system. This results in reducing the water retention capacity of the agriculture land, hence leading to lower agriculture production. To resolve this, TCSRD promoted the use of agriculture grade phosphorgypsum. This helps to increase the seed emergence by 50 to 100 per cent and provides calcium required for a healthy crop. 200 acres of



land was reclaimed by gypsum application in the Okhamandal and Kalyanpur region during the year. The farmers cultivated cumin, coriander and wheat which resulted in better output and the farmers enjoyed better returns. We are also promoting gypsum application of soil from other agencies.

Soil nutrient management

Soil testing is the best way to determine the available nutrient content in the soil and take appropriate measures to improve land productivity. TCSRD encourages farmers to conduct soil tests and fortify their farm land with nutrients as per the soil requirement. The intervention has not only helped to improve the soil but also led to the reduction in cost of production for the farmers.

Soil testing (Farrukhabad)

TCSRD in Farrukhabad has started

a new initiative called soil testing to improve the soil health through proper usages of balanced doses of fertilisers on the basis of soil testing results. The activities of soil testing include collection of soil samples from the farmers, sending the samples to the lab, explaining the results of soil test, training and counselling of farmers on proper and balanced use of fertilisers and nutrients. Under this initiative, 1,567 plots of soil have been tested during the year. Around 1,488 farmers from 107 villages of Amritpur and Shahabad tehsils of Farrukhabad and Hardoi districts have been covered.

Composting

The appropriate use of composting helps to maintain soil productivity and fertility. TCSRD promoted the production of good quality compost at the village level and encouraged farmers to use it. This has resulted in reduced input-cost for the farmers. Waste decomposer bacteria composting was demonstrated to 506 farmers.

Anti-stubble burning

To help farmers better prepare their land for the next cycle of crops, and to help them keep their soil fertile to provide optimal yield, TCSRD conducts the anti-stubble burning programme to help increase soil productivity through wheat sowing by happy seeders (223 acres, 102 beneficiaries, 21 villages), zero tillage (172.30 acres, 83 beneficiaries, 7 villages), and mulching of paddy maize stubbles and sugarcane leaves (407.9 acres, 187 beneficiaries, 45 villages). In 2020-21, this intervention was executed across all small and medium-sized villages of Farrukhabad and Hardoi districts of Uttar Pradesh.

Promotion of organic fertilisers

TCSRD in Farrukhabad has started a new initiative to improve the soil health through proper usages of organic fertilisers. TCSRD provides organic fertilisers at subsidised rates to the farmers. The recommendation of organic fertiliser is based on the soil testing results. This initiative is aimed at improving soil health and balanced nutrition of soil. Use of Organic fertiliser increases the organic materials in soil. It also increases the beneficial micro bacteria in soil. Under this initiative, 633.60 acres of land and 458 farmers from 100 villages of Amritpur and Shahabad tehsils of Farrukhabad and Hardoi districts have been covered.

Land Development - Mithapur &	Farrukhabad	
Description	Year 20-21	Cumulative
Land Reclamation (in acres) - Mithapur	200	583
Laser levelling (acres)		
Mithapur	131	242
Farrukhabad	633.6	3,365
Soil and water sample testing (no. of samples/plots) - Farrukhabad	1,567	6,604
Organic promotion - Farrukhabad	633.6	2,577
Deep ploughing - Farrukhabad	633.6	2,871

Waste Management

Dwarka is a key pilgrim destination and attracts a number of tourists/ pilgrims. This creates pressure on the waste management system of Dwarka. In addition, it has been identified that plastic waste has good potential as an alternate fuel. This could help in reducing the carbon footprint and in utilising waste in a sustainable way. Also the plastic waste creates nuisance by polluting the neighbourhood and causes harmful impacts on the local flora and fauna e.g. polluting the nesting sites of the turtles.

In December 2019, TCSRD set up a dry waste processing plant at Mithapur, in partnership with Sampurna Earth under the Swachh Bharat Abhiyan. The objective of the project was to improve sanitation in the area, reduce the environmental impacts and provide livelihood opportunities to the waste picker community in the region. TCSRD first created awareness in the community regarding segregation of waste at source. This was then followed up with monitoring people's behaviour and helping them sort the waste.

Post this, the waste collection process started and the resulting material was then recycled and reused. This was then processed at the centre. Recyclable waste was further processed into granule/ pellet forms that were sent to recycled plastic manufacturing units for reuse, while nonrecyclable waste was incinerated and used as fuel in cement manufacturing plants. This helps to reduce coal burning in industry. For livelihood generation, waste collectors were selected and incorporated under the umbrella of the Self Help Group (SHG) to create the socio entrepreneurship model. Under this SHG platform, each waste collector is given identity card, medical insurance and banking facilities. All the waste collectors follow safety rules while working on the floor.

Output and Impact

- The plant started with processing 1.5 tonnes of plastic waste per day and had increased this to 3 tonnes per day by the end of the year
- The Self Help Group has 13 members (6 males and 7 females) who get employment through this waste management plant.

Waste management plant collects municipal Solid waste from various Nagarpalikas across Gujarat and also collects solid waste from Shivrajpur Blue Flag Beach in Okhamandal. The initiative supports livelihood creation and promotes circular economy for Sustainable Development.



Biodiversity Conservation

The Mithapur region is known for its natural heritage including coral reefs, lush mangrove stands, turtle nesting beaches, wetlands, bird nesting sites and the scrub forests. TCSRD has been involved in biodiversity conservation initiatives for more than two decades now. The initiatives that are aimed at strengthening biodiversity in a sustainable manner all are now under the umbrella of C-SCAPES (Centre for Sustainable Conservation Action for Protection of Ecosystems of the Seas), a Centre of Excellence that was established by TCSRD in the 150th year of the Tata Group.

C-SCAPES (Centre for Sustainable Conservation Action for Protection of Ecosystems of the Seas)

To commemorate 150 years of the Tata Group, Tata Chemicals under the TCSRD umbrella launched C-SCAPES with the objective of it becoming a national centre of excellence. C-SCAPES focuses on coastal and marine biodiversity conservation, while at the same time, also looks at sustainable livelihoods based on the coastal and marine ecosystem. For an organisation that had its origin in the coastal landscape of the Mithapur region, C-SCAPES is a perfect gift to the nation on the 150th year of the Tata Group.

C-SCAPES is dedicated to the conservation and wise use of marine and coastal biodiversity for inclusive and sustainable development in India. Our objective is to empower marine and coastal conservation actions by convening and leveraging local, regional, and national stakeholders and partnerships, implementing, and demonstrating on-ground solutions, and providing credible knowledge and objective recommendations for policy and practice.

C-SCAPES's work is organised

into 5 areas: marine biodiversity protection; coastal ecosystem management; coastal community resilience-building; ocean education and communication; and coastal governance. Our diverse portfolio of conservation projects along India's coastline combines the latest science with the traditional knowledge of local communities to reverse biodiversity loss, restore and protect ecosystems and improve community wellbeing. Our projects also produce a wealth of information that feeds into C-SCAPES analytic capacity to

shape sustainable conservation practice, inform strong governance and policy interventions, and influence further action. In all that we do, we harness the experiences and expertise of our parent organisation TCSRD, Council members, and project and community partners, to maximise our ability to address the challenges to marine and coastal systems in India. Projects covering Climate Change adaptation, rescue of stranded marine animals, livelihoods for coastal communities, conservation education, and creating a database of ecologically sensitive areas across the coastline of India that will help in creating a decision support for development projects are the first few projects that the C-SCAPES is undertaking along with taking forward all the other ongoing initiatives.



Species and Ecosystem Conservation

Coral reef recovery project

Coral reefs are an important ecosystem and are often termed as rainforests of the sea. The Mithapur coast has a coral reef-hardly a kilometre away from the Mithapur township. It was to conserve this ecosystem that a coral reef restoration project was initiated in partnership with the Wildlife Trust of India and with support from the **Gujarat State Forest Department** in the year 2008. This year, we have also surveyed the reef area to assess the seaweed diversity of Mithapur. Along with that, seawater quality monitoring from 15 predemarcated sites was monitored every month. The health of the coral reef of Mithapur was assessed using colour-coded charts developed by the University of Queensland, Australia. A total of 166 corals were recorded along the intertidal and 53 corals along the sub-tidal regions of the Mithapur reef were monitored.

A coral garden is also being developed here. Substrate material to create 700 sq.m. of artificial reefs had been deployed off the coast of Mithapur. A coral nursery site has also been developed for the creation of a coral garden by using the locally available coral species.

This project also pilots various approaches to coral reef conservation which can be replicated at other locations as well. Overall, the project has so far been instrumental in the creation of over 2,438 sq.m. of additional hard surface area in the form of artificial reef structures, which are available for corals to colonise upon.

Commercial reef fish resources of Mithapur, Arambhada, Shivrajpur and Mojap were assessed weekly through landing centre surveys. We found 25 species during summer (March-May) and 32 species during monsoon (June- October).

Save the whale shark project

Whale Shark is the largest fish in the world and is an endangered species. It was hunted until the year 2001 when it was declared an endangered species and provided legal protection. The "Save the Whale Shark project" was launched in 2004 in partnership with the Wildlife Trust of India and the **Gujarat State Forest Department** to create conservation awareness amongst coastal communities on the protection of this endangered species. Since then, the project has been a big success and fishing communities who once hunted the whale shark have now turned guardians of this gentle giant. The project continues and subsequent phases were focused on the study of whale shark ecology for the establishment of a scientific database including migratory and breeding patterns of this fish, its feeding habits etc., and has been widely recognised as a role model at national and international levels.



In 2020-21, 34 whale sharks were rescued and released, taking the total figure of whale sharks saved since the inception of this project to 813. The project has helped achieve zero incidents of whale shark poaching across the Saurashtra coast.

Restoration of mangroves

Mangroves play an important role in filtering land run-off and controlling coastal erosion; they also regulate flooding and act as a sink for absorbing pollutants brought by the rivers. They also provide critical habitat for many marine species and terrestrial wildlife – the mangrove zones serve as spawning ground and nursery for many finfish and shellfish species. As part of its drive to strengthen coastal ecosystems, TCSRD has continued its mangrove plantation projects in Mithapur and Sundarban, with 60,000 and 55,000 mangroves planted in both areas respectively.

In both the locations, the approach was to link conservation projects with livelihood opportunities for local communities.

Community Conservation Coral Reefs in the Lakshadweep Archipelago

In partnership with Srushti Conservation Foundation (SCF), we are identifying and delineating the geographic boundaries of a new conservation reserve in Lakshadweep, for the protection of 200 sq. km. of the coral reef ecosystem. An evidence-based governance and management plan for the conservation reserve will also be co-designed with communities and relevant stakeholders in and around the islands.

The Lakshadweep coral reefs are heterogeneously distributed among 12 different atolls, out of which, we aim to work either on Agatti, Bitra, and Perumal Par. The inhabitants of Lakshadweep rely predominantly on these local reefs for food and protection. However, the recurrent impacts of bleaching events are particularly concerning for the future of this ecosystem. Over the last two decades, several anomalies have resulted in a drastic decline of ~ 40% of coral reefs in the Lakshadweep archipelago. Previous research has established that the coral reefs are reaching thermal maxima in the Lakshadweep islands, and thus there is an urgent need to strategically reduce other



pressures. The current situation is thus most favorable to further scale up this work by proposing more such conservation reserves for the sustainability of these reefs.

The dependency of the community on these reefs will be established through community consultation and systematic documentation of traditional knowledge. The focus will be given to key components of the reef such as baitfish (which is an invaluable requirement of the pole and line tuna fishing which is the main fishery and livelihood for the islanders) and other subsistence fishing resources such as octopus.

The actions being taken are systematic documentation of the coral reef ecosystem through literature reviews and field surveys; documentation of traditional knowledge and local dependencies on coral reefs and associated biodiversity; assessment of data and consultations with local government authorities and decision-makers towards making an informed decision on the geographical boundaries of the Conservation Reserve for further input into its management; training of community members and youth in collection of biodiversity data, monitoring, and management of the proposed Conservation Reserve; design and development of the management plan for the conservation reserve; documentation of best practice on sustainable reef resource management conducted and presented to communities; market assessments and value chain analyses for coastal resource products.

We aim to survey at least 5% of the total island lagoon at Agatti, Bitra, and Perumal Par islands; formation and establishment of Biodiversity Management Committee and People's Biodiversity Registers each at Agatti and Bitra; at least 20 women and 20 men are trained in conservation and management techniques for the Conservation Reserve; at least 2 women's Self-Help Groups (SHGs) for local arts and craft promotion; a publication on global/regional best practices in sustainable reef resource management; and Management plan for the Conservation Reserve is submitted to the UT of Lakshadweep for initiation of its declaration.

Restoration of Saltpans for Conservation of Migratory Waterbirds in Kanyakumari District, Tamil Nadu

C-SCAPES has partnered with the Bombay Natural History Society (BNHS), for enriching and restoring abandoned saltpans in Kanyakumari district, Tamil Nadu, to provide roosting, nesting, and feeding sites for migratory and resident waterbirds. The project is simultaneously developing supplementary sources of income for surrounding communities through varied uses of the saltpans.

Saltpans in Tamil Nadu are becoming increasingly important for the conservation of waterbirds because of the loss or degradation of many natural coastal wetlands that are being drained or transformed for industrial and urban development. The saltpans of Kanyakumari district in particular were found to be the only habitat for thousands of wintering and over-summering birds including the Greater Flamingo, as well as habitat for Common Tern, Lesser Crested Tern, and Greater Crested Tern on their way to their wintering destinations across the Indian Ocean. The abundance of several of the avian species using these habitats has been observed to be decreasing due to the abandonment and subsequent degradation of the saltpans, which has resulted in the desert-like conditions created by an absence of freshwater in the system.

The largest saltpans in Puthalam Panchayat (Kanyakumari district) have been largely unused for several years now. Of these saltpans, approximately 250 acres are reservoirs to store seawater/brackish water. The following actions are being taken: existing pumping facilities will be strengthened to channel the seawater into the condensers (shallower pans) to maintain them as bird habitats for at least 20,000 resident and migratory wetland birds, throughout the year; brine shrimp and polychaetae will be cultured within the ponds to create food sources for the birds; seasonal fishing systems will be put in place to the direct benefit of at least 5 fisherfolk families; 300 local youth will be engaged in migratory bird and wetland habitat conservation education; and at least 3 local youth will be trained to guide tourists through the saltpans during migratory bird season, as a source of supplementary income.

The aim is to achieve at least a 20% increase in numbers of migratory terns passing through the region between July and September, use the saltpan habitat; at least a 20% increase in wader species (including Black-winged Stilts, Kentish Plovers, and Great Thicknees) use the saltpans for nesting; at least five fishermen families benefitted from the use of ponds for fishing, between April to August (non-migratory season); awareness of the importance of wetland habitats and birds is increased amongst at least 300 students; and at least three local youth are trained to work as birdwatching guides.



Greening Projects

Indigenous flora biodiversity conservation

The indigenous flora of Okhamandal region is on a steady decline due to the rampant spread of an alien invasive species -*Prosopis juliflora*. The situation is expected to be further aggravate due to new development projects likely to come up in the region as well as the spread of yet another invasive alien weed – the Congress Grass (*Parthenium hysterophorus*), one of the world's seven most notorious weeds. Much of the grasslands in the region have been run over by these alien weeds. The Indigenous Flora Biodiversity Conservation Project at Mithapur is an ex-situ approach to create a botanical reserve for the protection of local strains of native flora species and the reserve spreads over 150 acres, and more than 150 flora species have been recorded here. The number of bird species recorded here stands at over 100, which includes the migratory species. Another 25 acres of dry deciduous forest patch is been developed to encourage local migrant species to stay back and breed here. Employee volunteers and family members have been helping with this project in multiple ways - site clearance and land development work, nursery activities for raising indigenous flora saplings, plantation at site and irrigation and maintenance work and also for monitoring of birdlife at the site.

The positive impact of the project has been the steady rise in the



number of bird species. In 2020-21, 2 new species of birds were recorded, while 5 new indigenous flora species were introduced.

Awareness and Training

Communication, education and public awareness (CEPA)

The "Prakruti" ECO clubs programme is part of environmental education initiative and is designed to create biodiversity conservation and Climate Change awareness amongst rural students, teachers and the community. The aim is also to encourage a participatory approach for conservation action. The programme involves volunteering by Tata employees and their family members, thus, helping enhance corporate rapport with the community and at sensitising employees on biodiversity around chemical plants. In 2020-21, 56 ECO clubs were supported in Mithapur, reaching over 6,000 students and teachers from schools in and around the area.

Prakruti parivar

Apart from the ECO clubs,

there is a group of more than 500 volunteers including Tata Chemicals' employees, their family members and retired employees called the "Prakruti Parivar" who have been involved in conservation awareness and action programmes for over a decade now. In the last year, the volunteers have contributed 2,975 hours to the various programmes. Both online and field programmes for volunteering were conducted during the year 2020-21.

No. of volunteers participated: 339 (this includes 62 employee volunteers + 277 family members).

Green school programme

The Green School Programme (October- 2018 to March 2021) was a collaboratively run initiative of TCSRD and Bharati Vidyapeeth Institute of Environment Education and Research (BVIEER), Bharati Vidyapeeth University, Pune. Due to Covid restrictions, offline school programmes are on hold since March 2020. A WhatsApp group involving principals and teachers from 25 schools and a few TCL volunteers has been very active since then. In 2020-21, hundreds of multimedia posts have been shared by all the members in the group. This group is also utilised as a platform to remove various misconceptions regarding nature. The member is also encouraged to forward correct information to a group from where he/she received it. Various webinars have been also organised which involved participants from the entire state as well. Webinars on biology of birds; beyond birdwatching; threats and threatened birds of Gujarat; World Migratory Bird Day; 124th Birth Anniversary of Salim Ali; World Wetland Day were also organised.

(Environment Conservation		
_	Description	Year 20-21	Cumulative
	No. of mangroves planted		
Alterio	Mithapur	60,000	595,400
_	Sundarban	55,000	673,000
	No. of eco-clubs promoted (Mithapur)	56	56
	Whale shark rescued (Mithapur)	34	813
Ê	No. of indigenous flora species introduced (Mithapur)	5	154
	No. of avi-fauna (bird) species recorded (Mithapur)	2*	108
200	No. of people covered through environment projects	6,084	192,776
	Acres of land developed as Dry deciduous forest	10	
2	No. of saplings - Development of nursery for assorted species of Indigenous flora	10,700	
X	Introduction of new flora species at biodiversity reserve plantation site	6	

CASE STUDY

Name of the Intervention: Farm Pond Name of the Beneficiary: Parbatbhai Ramshibhai Suva Location: Gurgadh, Kalyanpur, Devbhumi Dwarka, Gujarat

Parbatbhai has 5 acres of land on the outskirts of Gurgadh village. The saline ingression caused by his farm's proximity to the sea (300 to 400 metres away) resulted in rise in salinity in the ground water. This meant he could only grow monsoon season crops like groundnut, leaving



him unable to meet his household expenses and support his family. TCSRD helped him start the excavation of a farm pond on his land, as per guidelines and cost estimate provided by TCSRD technical civil engineer & social engagement team. He was also connected to the larger farming community, allowing him to seek and provide help and support to others in similar situations.

Today, not only is the water scarcity problem solved owing to the farm pond, but the soil removed during the farm pond excavation was utilised by placing it on the 5 acres of land, increasing soil fertility. The stones and rocks were also utilised to finish the stone fence surrounding the property, which solved the problem of stray animals. All of this resulted in an increase in income, allowing him to not only feed his family, but also to purchase four Jersey cows, through which he now earns money through animal husbandry. The water from the farm pond raised his income by Rs. 150,000 during the monsoon and winter seasons, allowing him to improve his living standard. He could afford to build a home and provide for his daughter's schooling. The new seeds are expected to produce more with continued efforts.

Enablers for Social, Economic and Environmental Development

CSRD believes that social, economic and environmental development lie at the heart of transformation. The enablers for all three critical elements of development are health, wellness and education. These help ensure long-term sustainability of interventions.



Education (Shiksha Maitree)

TCSRD runs programmes and works in various rural areas across India. We aim to achieve two primary objectives - zero drop-out and improving education quality through need-based educational programmes. This is done through various programmes and interventions across rural India. This year due to the pandemic, as schools were closed, we evolved our programmes to connect with the students digitally to reduce learning loss. We connected with the children through WhatsApp, tablet and video classes and also through learning activities by using different methods such as circulating worksheets, HP WoW bus etc. Youth volunteers acted as an interface between SMCs and other stakeholders and raised issues relevant to the education in the respective villages.

We continue to focus on the following aspects:

- Continuity of Education
- Quality Of Education
- Governance and Engagement

Continuity of Education

Digital education:

During the pandemic, TCSRD continued to support the learning of students through various digital platforms. Student groups were formed on WhatsApp, for students from 2nd to 10th standard. Through these groups, students could get access to study materials, take part in online competitions, and access daily online activities as well as worksheets. Virtual classes were also conducted daily in partnership with Buddy4Study.

Output

To provide support to deserving students from underprivileged backgrounds to continue their education, scholarships are given under Shiksha Maitree in which 4 projects are covered. These are Buddy4Study, Higher Education, Affirmative Action and Desh Ko Arpan programmes. 553 students availed scholarships under Buddy4Study, 168 availed scholarships under Higher Studies, 143 students availed scholarships under Affirmative action and 64 students availed scholarships under Desh Ko Arpan. Scholarships were distributed to 928 students under the Shiksha Maitree project.

In all, scholarships worth Rs. 31.22 lakhs were distributed to support students.

Quality of Education

World on Wheels - WoW Bus:

TCSRD introduced World on Wheels, an IT-enabled 24-seater computer training bus powered with green energy and backed by numerous software suites and cloud integration in 2018. Started in association with HP, this programme aims to bridge the education gap faced by those living in the Okhamandal block. The bus is being utilised to conduct IT and education classes on various topics for students, youth & farmers. During the year, TCSRD introduced 3 new WoW buses, one each in Okhamandal, Cuddalore and Mambattu. A second WoW Bus -Vidhya Vahini - was inaugurated to promote science learning in the villages of the Okhamandal area.

WoW buses were introduced in Mambattu and Cuddalore to promote digital learning in the rural areas around these plant locations. During the year, we covered 3 schools and enrolled 144 students in Mambattu and 2 schools and enrolled 130 students in Cuddalore.

Career counselling: Gujarat

Career guidance was given to the students of standard 9th and 10th. 92 students from 3 High schools of Okhamandal block - Gorinja, Vasai and Dwarka were covered. Experts connected with students on a virtual platform and guided them on their career. The students were connected by virtual platform with experts such as doctors, engineers and teachers who guided students on the requirements for each of their fields. Queries of students were sorted out by one to one interaction on the virtual platform. Students were also provided with handbooks that contain information about various courses for which they can opt in to better improve their chances of getting a job.

Cuddalore

Early Career Guidance Programme was organised to the community youth, and they were trained to figure out their life goals in chronological order by using various activities. 40 students from Sonachavadi, Vairankuppam and Thatchan colony attended the session. Women youth club formed in Vairankuppam village supported to mobilise the students and to conduct the session by following Covid-19 protocols.

Support for competitive exam preparation:

TCSRD supported students for preparing for competitive and government exams.

TCSRD conducted classes for Navoday Entrance Exam, National Means-cum-Merit Scholarship Examination (NMMS) Scholarship in Mithapur and Tamil Nadu Police Constable Recruitment exam & TNPSC (Tamil Nadu Public Service Commission) in Cuddalore.

50 students were covered for Navoday Entrance Exam, 45 students for NMMS Scholarship and 62 students for Tamil Nadu Police Constable Recruitment exam and around 50 students for TNPSC. The volunteer classes focused on those students who did not have any digital access to education. The volunteers are youth from the village itself. In 2020-21, a total of 75 classes were conducted covering about 1,500 students.

Learning and enhancement programme (LEP):

Started in 2014-15, LEP classes are conducted for students in 3 villages - Khatumba, Batisa and Poshitra of Okhamandal. These villages lack transportation for students of primary level leading to higher dropout. The programme runs in their village which eliminates the need to travel and is helping to bridge the learning gap by innovative methods of teaching.

LEP classes are conducted for standards 1st to 8th covering 88 students.

Learning and migration programme (LAMP):

In partnership with the American India Foundation, TCSRD has been implementing the Learning and Migration programme in communities that are most vulnerable to seasonal migration such as Koli and Rabari, as well as those from Scheduled Caste and Scheduled Tribes covering remote blocks of Kutch, Banaskantha, Sabarkantha, Bhavnagar, Surendranagar, Morbi, Dang, Dahod, Panchmahal, Mahisagar, Narmada and Tapi.

The programme aims at improving access, quality and governance across government schools in the remote villages of districts that are affected by the seasonal migration, and the resulting loss of access to education for the children of these affected families. Under the programme, seasonal hostels and learning resource centres have been set up to demonstrate practices that would help in ensuring compulsory education and improving the quality of education.



Due to the pandemic, access to learning for the children was ensured through a combination of online & offline modes, reached through home-based learning support.

- Children who are not having access to smartphones or internet: They were reached through story books & learning material & assessments at their homes by engaging Youth volunteers & Adolescent Girls' group members.
- Children having access to smart phones/ internet: They shared videos on language, Math and science through WhatsApp groups.

Wherever possible learning activities were being facilitated in small groups of children with social distancing in different clusters across the villages.

Village learning centres (VLC):

TCSRD aims to support government schools and children of age group 6-14 years with supplementary education that will equip them to grow as socially committed individuals with strong values and a solid educational foundation. TCSRD is running 5 VLCs in Cuddalore and 12 VLCs in Mambattu with the help of village volunteers.

Objectives of VLC:

- To improve the quality of education by the practice of innovative methods of teachings
- Reduce drop-out rate in schools especially among the girl students
- To support children to complete elementary education

This will be achieved through conducting regular forums for children where relevant topics like life skills, health, nature, education, arts & crafts, politics and philosophy are discussed.

TCSRD implements the Natural Language Appreciation (NLA) methodology in Village Learning Centres of Cuddalore with the help of ISA Language Lab at Auroville. It provides holistic language learning experience using heARTful techniques which integrates body, mind and heart to uncover the joyful inner nature of the child. Around 200 students have benefitted from this technique. 404 students in Mambattu and 205 in Cuddalore are enrolled in our VLCs.

Governance and Engagement

Virtual School Management Committee (SMC) meetings were organised for 96 schools covering 986 SMC members in Okhamandal. In the LAMP programme, regular meetings (virtual & offline) were conducted with the Citizen Educators, School Management Committee (SMC) and Panchayati Raj Institution (PRI) members to discuss the issues related to education as well as develop a collective approach to address the issues.

	Description	Year 20-21	Cumulativ
	Scholarships		
	Scholarship to students for continuing education (higher studies/professional course/ technical course)	168	1,513
	Scholarship to students for continuing education from primary to higher studies with Buddy4Study	553	1,611
	Desh ko Arpan - Mithapur	64	889
]	Education classes for drop out girls - Mithapur	157	232
0(Career resource counselling	137	443
	No. of students supported in Mambattu	40	444
	No. of students supported in Cuddalore	235	385
5.19	No. of youths given coaching to appear for Government job exams	32	32
	Students attending classes online (Covid-19) - Mithapur	15,506	
-	Impact indicators		50
	% enrollment/continuity	27	50
	% improvement in learning levels (MATH - 3 LEP villages - Khatumba, Batisa & Poshitra)	7	16
	% improvement in learning levels (Language - 3 LEP villages - Khatumba, Batisa & Poshitra)	1	4

RUBY:

The RUBY intervention is carried out in collaboration with Rallis India. To support in creating Ujjwal Bhavisya for the next generation by encouraging children to opt for formal education, various educational programmes focusing on Learning with Fun concept are being implemented and are known as – RUBY (Rallis Ujjwal Bhavishya Yojana). RUBY focuses on the following:

- English
- Science
- Digitalisation
- Scholarship to needy students pursuing technical education
- Infrastructure support
- Capacity building of government school teachers

The schools covered under the RUBY programme have more than 50% of Schedule caste and Schedule tribe students. In FY 21 RUBY was implemented in 30 schools in Gujarat, Maharashtra, Karnataka, Telangana, Andhra Pradesh and Chhattisgarh. More than 6,900 students were covered through various interventions.

Science intervention:

While working in various schools we realised that students from rural and remote locations find it difficult to cope up with science. For effective implementation of this we have partnered with a science expert who comes with a background of developing various science experiments for State Board Science Committee. All these sessions are activity based. Students undertake 100 experiments in a year. This helps to clarify the basic concepts of science and also helps to develop liking towards science. At the end of year these students put up science exhibitions, exhibiting science projects which they make from locally available material.

English intervention:

English intervention is designed to improve the Proficiency in English reading, writing and comprehension skills for students from vernacular medium. TCSRD in collaboration with Rallis has partnered with Leap for Word organisation for this intervention. They design & develop the course for students and teachers, train identified teachers and monitor the students and teacher's performance on a regular basis. The programme is implemented by taking classes every day during the school timings. To recognise the efforts of the community teachers, remuneration is paid for their contribution on a monthly basis. At present there are 8 community teachers for the said programme across 2 locations.

Scholarship support:

Support is provided to poor and needy students from technical education through the Vidhyasaarthi portal, which is operated by NSDL.

Teacher sponsorship:

TCSRD -Rallis has been sponsoring salaries of 19 teachers in schools of its operational areas.

During pandemic virtual classes were conducted and good response from students was observed. Various methods were used for getting connected with students like WhatsApp groups, zoom meeting, google meet, provided educational kits for home-based learning. Parents and teachers have appreciated the efforts.

IMPACT

- Positive response and feedback from school authorities, parents and students.
- All interventions carried out under RUBY have a repetition value, which implies that whatever actions we carry out under RUBY are appreciated and demanded to be repeated in other schools or communities.
- Increase in confidence level and self-esteem of students
- Increase in enrollment and attendance in school & school admission.

Activities undertaken to increase enrollment, attendance and school admissions include face-to-face English sessions were conducted by community teachers at students house in Akola. A WhatsApp group was created for students at Lote to teach English. Science session were conducted as well as science kits covering 25 practicals were distributed in Gujarat.



Health & Nutrition



One of the major reasons why people slip back below poverty line is medical expenditure by vulnerable households. It becomes imperative that TCSRD facilitates communities for better health care, nutrition, safe drinking water and better sanitation facilities. By providing preventive, and where possible, curative health services TCSRD acts as a bridge between the government and the community, facilitating access to government health services wherever possible to the unserved population. TCSRD's primary areas of focus have been reducing Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) through several initiatives promoting nutrition and nutritionrelated education, while also working in the area of general health treatment and education regarding safe drinking water and sanitation.

Holistic Nutrition Programme



To promote positive health, prevent undernutrition in children and reduce the morbidity and mortality among women and children due to malnutrition.

OBJECTIVE 1

balanced diet for

health changes.

sustainable and positive

Enhance nutritional status: Fill Tribal Thali with the missing components through locally available nutritious food products and make it a complete



Linkage: To act as a bridge

between the government health services and the community thus facilitating access to government health services wherever possible and ensure sustainability.



POPULATION The direct

target groups are pregnant women, lactating mothers, under two-year children as well as adolescent girls.

TCSRD is working with key health influencers - the community and government health staff to reinforce its message and ensure sustainability.

Description		Unit of Measurement	Year 20-21	Cumulative
Nutrition Clu	ıb	No. of Nutrition Club formed	53	53
		No. of beneficiaries (Adolescent, Lactating mother, Pregnant women)	474	474
Community I	Meetings	No. of sessions	634	2,728
To increase a & participati community t health & nut (engage)	on of the owards	Community Based Events (CBEs)	708	1,444
Orientation of Health and IO		No. of trainings	21	84
Seed kit distr households f garden		No. of HHs	930	2,029
Women, mot adolescent g		No. of anaemia screening camps	4	14
Anemia scree females (ado girls, pregna and lactating	lescent nt women	No. of beneficiaries	4,682	6,000+
Follow-up & counselling		No. of beneficiaries	1,852	1,852
VHND: Supp and facilitation activity	orting ng of	No. of VHND sessions	523	1,844
Ensure provis services thro AWCs	sion of ugh the	No. of AWC	76	81
Malnutrition camp: Anthro measuremen 5 children	opometric	No. of Malnutrition screening camp	4	14
Adolescent h hygiene awa		No. of children	8,967	9,000+
programme		No. of schools	11	46
		No. of sessions	56	539
		No. of beneficiaries (students)	1,062	2,500+
Impact Indica	ators			
Prevalence o	f anaemia a	imong females	67.0%	
			3 50/	
Prevalence o	f severe an	aemia among female	2.5%	

Enhance Nutritional Status

Interventions to complete

the THALI: With the assumption that small changes in the existing patterns and with available nutritious food products, we shall be able to fill the nutrition gap (diversity, availability and adequacy) and contribute to complete the Thali.

- Preservation: Preservation of available food products like drying of various vegetables/food products (making dal wadi with moringa/ palak/ methi flavours, papad, pickles, etc.) to improve the food security/ availability during the lean period of the year.
- Processing & Preparation: Few processes with the help of which one can improve the nutritional availability like – fermentation, sprouting, roasting, tempering of grains to increase the bioavailability of nutrients. Recipe demonstration with locally available nutritious food/ forest produces to ensure acceptability and sustainability with improved nutrition, for example - moringa leaf and curry leaf recipe, use of

iron utensils for food preparation, etc.

Finding THALI fillers – through scientific approach:

Following the scientific approach in finding the THALI filler, nutrition analysis of local food products has been carried out in association with Innovation Centre Pune. The nutritional values of the samples (LANF) were significantly high.

Promotion of household kitchen garden and local food recipes:

To ensure food security and dietary diversity along with sustainability, TCSRD promotes nutri-gardens/ kitchen gardens (HKG) by identifying households that are inclined towards creating their own kitchen gardens, provide them with the resources and assistance they need to get started and also ensures the consumption of the produced nutritious food to enhance their nutritional status. The programme was implemented in Mambattu, in which home-based herbal gardens were promoted in 501 households in 12 villages in partnership with The Covenant Centre For Development (CCD). This has helped in generating awareness among the people regarding the available herbal resources and also decreasing the expenditure on private doctors and medicines.

TCSRD has formed nutritional clubs, which monitor the use of the herbal plants and focuses on improving health literacy, connecting rural communities with government health care facilities, promoting primary health care, enhancing awareness on anaemia and malnutrition.

OUTPUT

Amravati and Barwani:

- Seed and saplings distributed to beneficiaries for HKG: 976
- HKG developed: 918
- Number of nutrition clubs: 53

Mambattu:

Number of nutrition clubs: 12

Mithapur:

 No. of schools provided with vegetable seeds: 2

Parameters Total Calories (Kcal/100g)	Moringa Leaf Powder 335.8	Curry Leaf Powder 329.65	
Protein (N*6.25) (%)	18.73	14.46	
Total Dietary Fibre (%)	32.68	52.86	
Phosphorus as P (mg/100g)	213.45	131.23	
Vitamin C (mg/100g)	12.94	15.27	
Iron as Fe (mg/kg)	1,285	371.5	

Linkage: Capacity Building and Community Health Education

Capacity building of government staff government health staff (GHS), AAA platform (ASHA, aanganwadi worker, ANM):

This initiative involves capacity building for GHS to deliver better public health and nutritional services for children, pregnant women and lactating mothers, ensuring a healthier outcome for families in the long term by connecting rural communities with government healthcare facilities. Facilitation and supporting Village health and nutrition day (VHND) is one of the most important platforms for providing health and nutrition services to even the remotest of regions. Strengthening VHNDs will help in improving the health of the community.

OUTPUT

Amravati and Barwani:

- Government Health staff (GHS) Orientation & training sessions conducted: 17
- VHND sessions facilitated and supported: 595

Mithapur:

- Mamta Divas / Village Health Day (VHD) sessions with ICDS: 9
- Training given to 22 AWW and 16 ASHA for general health: Total 38

Community campaign, awareness and

engagement: The aim is to create an enabling environment for positive change by improving health awareness and health seeking behaviour of the community. Efforts are in the direction to create behavioural change and enhance nutritional knowledge. The specific objectives of engagement events are to:

Awareness about THALI by

promoting PPP (Preservation, Processing and Preparation).

- Enhance the awareness of the mother/ family/ community about IYCF (Infant and Young Child feeding) practices & make them understand about the nutritional needs of the child/ women (pregnant & lactating) through proper nutrition and health education.
- Menstrual Hygiene Management (MHM) and school WASH initiative strives to improve the health of the students, their families, as well as the community at large by creating a cadre of youth who will act as community change agents.

OUTPUT

Amravati and Barwani:

- Health and Nutrition counselling sessions: 1,308
- Number of schools covered for School Health Education: 16
- Number of students reached: 1,062
- Number of School Health sessions conducted: 53

Mithapur:

- Health and Nutrition counselling sessions: 15
- Number of schools covered for School Health Education: 15
- Number of School Health sessions conducted: 15
- Number of students: 795

Monitoring outcomes and meeting immediate needs

Anaemia prevention and Malnutrition management: The activities carried out are as follows:

- 1. Screening camp (Biannual)
- Malnutrition screening of under-5 years children and referral of severe cases to NRC (Nutritional Rehabilitation Centre).

- Anaemia screening: Hemoglobin estimation camp for pregnant & lactating women and adolescent girls.
- 2. Creating awareness about anaemia and malnutrition: causes and consequences along with its probable solutions; IYCF practices etc.
- 3. IFA (Iron Folic Acid) tablets distribution as per the need and deworming of children.

OUTPUT

Amravati and Barwani:

- 3,315 women were screened for their anaemia levels. 5,873 women were provided IFA tablets as per requirements along with counselling and regular follow up. The intervention has helped to bring down prevalence of anaemia in the women from 72% to 67% (in 2020-21)
- Nutritional Counselling done to 2,697 pregnant women, 3,006 lactating women and 3,360 adolescent girls for good nutrition intake.
- Children screened and provided counselling and support (under 5 years): 3,307 screened in February/March 2021
- Aanganwadi centres covered: 80
- 1,872 children underwent deworming (Barwani)

Mithapur:

- Counselling done for 157 pregnant women, 123 lactating women and 285 adolescent girls for good nutrition intake
- Children screened (under 5 years): 1,205 children
 Out of 1,205, 18 children are severely malnourished and
 63 children are moderately malnourished.
- Malnourished children provided

with medicines: 81

- No. of villages covered: **17**
- No. of aanganwadi covered: 27

General awareness session-Mithapur:

- TCSRD held sessions for adolescents in schools, using audiovisual tools to raise awareness of the physical and mental changes that occur during puberty. The sessions were attended by 510 schoolgirls and 385 non-schoolgirls in total.
- At aanganwadi centres, Hb screening was done. Nutritional

counselling and supplementary medicines such as iron folic acid, multivitamins, and calcium were given to them as needed.

- Some of the activities carried out during the year to raise awareness about nutrition, general health, and hygiene among adolescents (for 795 students from 15 schools) included a salad decoration competition, a hand washing demonstration, and nutrition awareness sessions in school about healthy eating.
- A total of 109 patients were

seen via telemedicine for health education and counselling. Through telephone, WhatsApp banners, and other means, health awareness and counselling to ASHA and AWW were provided in five villages (Lalpur, Batisa, Makanpur, Positra, and Padali).

- Students at Skill Development Centre received training in health and hygiene, as well as first aid.
- A total of 795 students were covered under the nutrition awareness programme in 20-21.

Description	Unit of Measurement	Year 20-21	Cumul
Nutrition Club	No of Nutrition Club formed	1	
Community Meetings	No. of sessions	65	
Orientation of Govt. Health and ICDS staff	No. of trainings	1	
Women, mother and adolescent girls	No. of anaemia screening camps	1	
Hb test conducted for women and adolescent girls	No. of beneficiaries	858	9
Follow-up & counselling	No. of beneficiaries	858	g
Adolescent health and hygiene	No. of VLC/Schools	4	
awareness programme	No. of sessions	48	
	No. of beneficiaries (students)	444	4

Drinking Water & Sanitation

Under this pillar, the interventions are guided towards promoting clean and safe drinking water and good sanitation. We help provide clean water through roof rainwater harvesting structures, repair of hand pumps, supporting households with water purifier systems through the Samriddhi and Swach Tarang project. Behaviour change programmes, Swachh Bharat Mission cleanliness drives, construction of toilets and sanitation units help create good sanitation in the rural areas.

Samriddhi

The Samriddhi project (a joint project with Ncourage Social Enterprise Foundation) is focused on two main objectives.

- To provide the rural community with access to safe drinking water at affordable prices.
- To generate livelihood opportunities through entrepreneurship in the rural areas.

In 2020-21, this project was implemented across villages in

Uttar Pradesh, Madhya Pradesh, Rajasthan, Gujarat, Maharashtra & Assam. Across these areas, entrepreneurship was promoted while also encouraging people to adopt Tata Swach water purifiers to free themselves from the health and economic burden of water-borne disease.

During the year, 1,330 people were made aware and sensitised for using clean and safe drinking. Water purifiers are promoted in villages of Okhamandal taluka for safety from water borne disease. At present at Mithapur there are 3 SHGs each with one social animator who helps promote clean drinking water. They help in promotion and sales of drinking water purifiers. They also spread awareness in rural areas to avoid water borne disease. This will also provide an extra income source for self-help group members. This year, 16 water purifiers were sold by social animators in Okhamandal taluka.

Enablers f	or Sustainable Development - Project	Samriddhi - Drii	nking Water
Description	Unit of Measurement	Year 20-21	Cumulative
Drinking Water	No. of survey by SP	34,508	7,11,722
	Total public awareness meetings	44	11,242
	No. of members in meeting	1,330	2,38,103
	Training	17	101
	No. of beneficiaries	6,336	33,164
Impact indicators	% increase in earning of VLE/DLE	8-10%	

Swach Tarang

In order to address the clean and safe drinking water problems being faced by the underprivileged communities across India, TCSRD, in association with Ncourage Social Enterprise Foundation (Ncourage) started the Swach Tarang initiative in Feb 2019. The initiative aims to reach out to the underprivileged communities by providing them the access to safe and clean drinking water and thereby helping them in reducing instances of water-borne diseases. Ncourage, through this initiative is installing community purifier units called Tata Swach Tech Jal purifier which is based on innovative and sustainable water purification technology. 54 Tech Jals were distributed in 10 districts There are 2 main aspects to the project:

a. Mobilisation of communities through collaboration with partners: Ncourage with help of TCSRD started working with grassroots partners (NGOs, SHGs, FPO etc.) to mobilise the community, understand the need and reality at the ground level. In order to identify the correct intervention based on community structure, clusters and groups awareness sessions were conducted for the community. Assessment was done to understand the demand, capacity/volume requirements by the clusters and readiness of the community to look after the water purification system. Based on this appropriate community space and the beneficiary groups were then identified. b. Operations and maintenance:

To establish systems and provide water purification facilities to these underserved communities, a tripartite arrangement was advocated which included contributions from partners/ NGOs and the communities along with our support. The contributions received were garnered and put together for installing purifiers for the targeted communities directly or through associated NGO/SHG partners. TCSRD and Ncourage Foundation also collaborated with other corporates helping them with water purification solutions for the communities which they supported.

Our first Tata Swach Tech Jal was installed in 2019 in Gahiri village of Pratapgarh district, UP. Tata Swach Tech Jal with a purification capacity of 500 litres per hour was assembled and put in place to cater to their safe drinking water requirements. This was a life changing moment for them and also for nearby villagers like students & their parents who used to come for schooling here. Seeing this, the village panchayat appointed an unemployed needy person and gave a task of distributing purified water from Tata Swach Tech Jal to nearby villages at Rs. 5 per 20 litres jerry can. About 78 households are being catered with Tech Jal purified water, as of now. This has led to employment and also created awareness amongst villagers the importance of clean drinking water. This clean water distribution model will be replicated by nearby villages like Gondai & Jondhpur where Tata Swach Tech Jal has been recently installed.

WASMO Project

Implementation of village drinking water scheme under Water and Sanitation Management Organisation (WASMO) project was taken up across villages of Okhamandal taluka. In 2020-21, a total of 610 families were facilitated with household tap connections. In addition, 3 RO Plants, 2 Drinking Water Wells, 3 Bore Wells and

6 Roof Rainwater Harvesting Structures were constructed. Capacity building of pani samiti (community-based organisations) members was done through meetings, exposure visits and training.

For all the 11 pani samitis of 11 villages - Mojap, Mulvel, Navi Dhrevad, Padli, Positra, Tupani, Bhimrana, Charakla, Hamusar, Lovrali and Makanpu trainings on water quality, maintaining books of accounts, technical and administrative training as well as on various social aspects were included.

Due to TCSRD efforts, in 2020-21, 1,005 households now have access to clean drinking water.

CASE STUDY

Name of the Intervention: Holistic Nutrition Project Name of the Beneficiary: Manisha Jamre Location: Gudi Pakhalya, Pati Block

The village Mrs. Manisha Jamre lives in is in the interior regions of the Pati block and is underdeveloped. This meant that there were many children in her village who were malnourished due to lack of knowledge and awareness about proper nutrition. During a sector level meeting, Mrs. Manisha discussed



this issue with the TCSRD team, who not only motivated her to take action, but also provided support and training she needed to make a difference. She understood how to interact with the community and create health awareness, while also learning how to deal with the queries of people in a positive manner. TCSRD helped all frontline workers gain knowledge on community mobilisation. Aanganwadi workers like her also benefitted because she was able to learn a lot about maternal and healthcare issues, as well as child health. TCSRD provided training on various health aspects of both mother and child, such as Infant and Young Child Feeding (IYCF) and its components, nutrition and all its aspects, and more.

As a health service provider, this has been invaluable as Manisha has been able to help a lot of people in her village, especially when Covid-19 hit. During this time, she personally visited multiple homes to provide counselling on improving immunity to fight the disease, as well as create awareness about the disease itself.

Building Social Capital

B uilding social capital is a key cross-cutting theme in all our programmes for long term sustainability. The areas of intervention are women empowerment, reducing inequality of marginalised communities through Affirmative Action, community engagement, strengthening of CommunityBased Organisations (CBOs), partnerships for achieving goals and setting up sustainable social enterprise models.

Women empowerment



engagement

Reducing inequality of marginalised communities through Affirmative Action

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Women Empowerment

TCSRD believes that societal development remains incomplete without the participation of women. Women act as torch-bearers for the next generation, as they play the role of the first teacher for their children. In the rural scenario, although women contribute equally in generating income for the family by participation in agricultural and farm-based activities and perform household chores, their contributions are not counted at par with other male members. TCSRD strives to bring in economic independence through various interventions.

Self-Help Group

The concept of Self-Help Groups (SHG) is based on "Unity is Strength" - where informal members come together to form a group for taking collective action for a common cause. Today, SHGs and their micro-enterprises are playing a vital role in changing the prevalent socio-economic scenario by raising the level of income and standard of living of rural people through self-empowerment.

Started in 1996 in Mithapur, today it has extended to more than 37 villages in Okhamandal and Kalyanpur blocks of Devbhumi Dwarka district, with 236 SHGs in place that impact more than 3,260 household members. TCSRD continues to provide training and support to SHGs at Mithapur. They have been supported with capacity building training, bank linkages, micro credits, conducting regular meetings, helping in regular transactions with banks, etc. Some of the group members have also been trained on quality of life, entrepreneurship development and skill training through Central Board of Workers Education, Rural Entrepreneurship Development programme and other partners (GRIMCO).

In addition, in Babrala, we have created 51 SHGs, who are running sustainable group or individual enterprises and are manufacturing products for local markets. These products like incense sticks, incense cones, dhoop, puja materials, etc, are being sold by the SHGs locally through the Rural Mart.

These SHGs have positively impacted the lives of women in many ways. From economic empowerment that gives them the confidence to be part of the household decision making process, to increasing their knowledge and awareness that improves the socio-economic state of not just their own homes, but of the community as well. Today, women who are part of SHGs are solving problems as a collective and uplifting entire communities through their actions.

Today, women who are part of SHGs are solving problems as a collective and uplifting entire communities through their actions.

Through the SHG model, TCSRD aims to build a sustainable institution of women who come together to convert their collective efforts to enhance women empowerment and the role of women in rural India.

	Self-Help Groups					
	SHG	Savings (in lakhs)	Internal loan (in lakhs)			
Mithapur	236	>3,260	6,2.46	126 (1 crore 26 lakhs)		
Babrala	51	638	7,512	5,48,936		

Capability Building and Facilitation for Establishing Linkages

Hun Pan Digital

To address the problems faced by women in SHGs regarding the submission of their savings and loan installments in banks during the lockdown, TCSRD started a digital training programme to help them. The "Hun Pan Digital" training programme aims to provide digital financial training to all SHGs as part of their livelihood operations, empowering women in SHGs and bringing them into the digital world.

Self - Employment & Enterprise Development

The SHG is earning an average monthly income of ₹1,000 to ₹3,000. This is the individual

earning by 500 women through various initiatives including animal husbandry, small individual enterprises and so on. The sale through Rural Mart in Babrala is ₹76,760.00.

Social Empowerment

In 2020-21, TCSRD made the SHG members aware of the government's Sukanya scheme, savings through fixed deposits, support to apply for PAN card, various insurance schemes through bank linkages and helped 397 women under various schemes.

OUTPUT

 No. of members joined training: 460 No. of members completed training: 185

IMPACT

- No. of women provided digitised financial training: 460
- No. of SHGs trained: 137
- Total no. of SHGs: 236
- No. of SHGs fully digital
- (100% savings plus loan): **30**
- No. of women covered under

capacity building programme: **1,008** (460 in Hu Pan Digital and 548 in animal husbandry)

- Internal Loans: Rs. 126 Lakhs
- Annual savings Mithapur + Babrala: Over Rs. 69 lakhs

Community-Based Organisations

TCSRD supported various businesses during the year including Dwarkesh Foods Foundation and Nirantar Group Masala Unit.

Dwarkesh Foods Foundation

The Dwarkesh Foods Foundation is a social initiative by TCSRD in collaboration with DIC, Khambhalia. It is a section 8 company owned and run by 10 SHG women from the Okhamandal area. Dwarkesh Foods Foundation offers a line of 18 different products with varied tastes and flavours of Okhamandal. They have their own marketing as well as sales team who will take it forward in the process of door-to-door retail services in the area. The journey began back in 2020, when the corona was at its peak. These women came together and contributed an amount of 10 lakhs to establish a chip and farsan

production unit in Dwarka. All the

legal and regulatory requirements were done online during the lockdown period, which included GST registration, FSSAI certificate, Section 8 incorporation certificate etc. The installation of all the machines was done in August 2020. After the rigourous technical training and awareness, these women were ready to produce the products. Since October 2020, these women have been going from village to village for marketing. Now, after all the hard work and patience, they were ready to launch themselves into the competitive market.

A great support was also provided by the District Industrial Commission, Khambhalia by providing a subsidised rate loan at 25% of the total amount paid by them, a loan of 25 lakhs was availed. The inauguration of the Dwarkesh Foods Foundation was done on the 3rd of March 2021. These women not only show us the spirit of true empowerment, but are also an inspiration to the women around us.

Nirantar Group Masala Unit - an initiative for people with disabilities

With the rise of Dwarkesh Foods Foundation came the requirement of besan and other masalas. In order to meet the requirement and empower persons with disabilities of Okhamandal, Nirantar- a self-help group with 11 people which will work to process gram into besan and various other spices into masala in Dwarka was formed. They have purchased two processing machines in which one will process gram to dal and other will process dal to besan as well as spices into masala. It has a capacity of production of



100 kgs per hour. The gram and spices will be purchased from OFPCL and will be sold to Dwarkesh Foods Foundation creating a circular cycle between all the initiatives of TCSRD. The inauguration of Nirantar was also done on 3rd March.

These two models will create a circular economy in the local market itself as it will have the production of raw materials to manufacture goods to sales in the Okhamandal region itself. It will help in Vocal to Local as well as Atmabharat initiative of the government.

Rural tourism

Harivan Farm - A carnival to soul: A youth led community-based tourism.

The Okhamandal's community-based tourism offers a unique opportunity to travellers to enjoy the cultural and fun activities of the place in an environmentally responsible and culturally traditional manner. This tour has been created by the village community to develop the economy and to save the cultural heritage of the place in a fun, safe and feel-good way. The tour is flexible according to audience to discover their own interest with a vivid range of activities such as yoga, meditation, agriculture, traditional art forms, historical games, explore beach-local ride on chakda, cultural night.

Kasturi

Kasturi works with women agripreneurs and is a learning and development initiative to facilitate women agripreneurs across the value chain of the food sector including collectives of producers (FPOs and SHGs), service providers (educators, suppliers, channel partners, processors, investors, volunteers) and consumers. Kasturi offers training and networking services for women farmers. The service focuses on soft skills including self-leadership, family coaching and social collaboration skills with the common vision of healthy food for all. It is a threestep process involving training workshops, developing women facilitators and developing women led networks. Kasturi also coordinates and monitors activities

of its institutional partners. Efforts are put in to improve the entrepreneurial skills through interactions with business experts, test marketing, methods of consumer feedback, participation in exhibitions etc.

In 2020-21, Kasturi served almost 10,000 women agri-entrepreneurs directly and indirectly through its multiple services. This includes over 9,000 women who participated in Kasturi programmes, both offline and online, 539 certified women trained by Kasturi EDP and 202 participants trained by community trainers of institutional partners trained under the Training the Trainers programme of Kasturi.

IMPACT

- No. of trainers certified under Kasturi EDP: 202
- No. of Kasturi flagship workshops conducted: 38
- No. of women trained by Kasturi EDP: **539**
- No. of participants in Kasturi online programmes: 9,146

Reducing inequality of Marginalised Communities through Affirmative Action

Tata Chemicals has adopted the Tata Affirmative Action programme to reach out to the scheduled caste and scheduled tribe population that is deprived of development opportunities. The Affirmative Action programme is a commitment to ensure equal opportunity to the socially backward sections of society by mainstreaming them with developmental initiatives. All programmes and interventions have a component of affirmative action wherein an average of 20% benefits accrue to people from socially backward communities.

The focus areas under the Affirmative Action programme include education, employability, entrepreneurship development, employment and essential amenities.

Education

TCSRD's Shiksha Maitree programme aims to enable and support the socially backward communities to continue schooling, complete secondary, higher secondary, graduation and post graduate education. TCSRD targets zero dropouts at all levels of education. Under its various programmes are scholarship support, training of teachers, introduction of innovative methods of teaching, a bridge course, open school, Learning & Migration Programme (LAMP), and digital literacy amongst others. The LAMP programmes have helped reach out to a larger number of SC/ST students. In 2020-21, 325 students mainstreamed at primary, secondary and university levels.

Under RUBY (Rallis Ujjwal

Bhavishya Yojana) intervention, TCSRD in collaboration with Rallis India, works towards improving the academic performance of students and enhancing the capability of teachers. This provides education to primary, secondary and higher secondary students at 30 schools in 5 states benefitting 6,990 students including scholarships offered to needy students through Vidyasaarthi (3,502 AA students).

Employability

TCSRD's employability programme 'Badte Kadam' has two components: skills required within TCL and skills based on national/local needs. TCSRD runs two programmes under employability - Badte Kadam and TaRa. The main objective of the Badte Kadam Programme is to enhance employability (wage/ self-employment) through appropriate vocational and life skill development. Badte Kadam Programme is being implemented by:

- Skill development through own centres
- Skill development through strategic partnerships (e.g. Tata



Strive)Promotion of life skills for empowerment

Under TaRa intervention, tailoring, beauticians, computer training, goat rearing and poultry courses were provided at skill training centre in Dhasai near Mumbai in partnership with Light Of Life Trust (LOLT).

OUTPUT

 Total trained: 348 (99 AA) by LOLT

Entrepreneurship Development

Under the Entrepreneurship Development Programme (Udaan), TCSRD promotes development of entrepreneurs to foster selfreliance. TCSRD identifies potential areas in which enterprises can be developed and matches it with the idea of the people willing to enter entrepreneurship.

SHGs & Okhai

Of all the SHGs, TCSRD has established 22 AA groups covering 245 members. They have been supported with various capacity building and entrepreneurship training. The SHG members who are artisans and are linked to Okhai receive help to improve their household incomes. Small clusters of SHGs have been established to establish group enterprises such as rexene cluster, fibre articles cluster, etc.

Okhai has 27,000 artisans Pan India. Out of 27,000, 23,000 artisans are from Mithapur including 75 artisans from AA communities.

Ncourage Social Enterprise Foundation

TCSRD has partnered with the Ncourage Social Enterprise

Foundation, who in turn initiated partnerships with federations/ organisations to work towards providing market connect and generate fair returns for the AA producers and entrepreneurs. Ncourage also strives to work with AA communities on the entire value chain and assist them for institutionalising processes.

OUTPUT

- Total no. of households/farmers for products:
 2.677
- Farmer classification: Tribals/ST/ SC/OBC: 2,672

Rural Entrepreneurship Development Programme

Various REDP trainings were provided during the year. 37 young people were trained in REDP in 2020-21.

- Bardiya Village Hand
 Embroidery Training: A visit to the Okhamandal block village of Bardiya and a discussion with 35 women were organised as part of Affirmative Action. Out of the 35 women, 17 women enrolled in the Bardiya Village Hand
 Embroidery Technical Training.
- Animal Husbandry: A linkage between government's ATMA project and women from Padli village was established. In all there are 42 women, out of which 16 women belong to the AA (SC community). The name of the group of these 16 women is Momai group-Animal Husbandry and Kitchen Garden, one of the four groups represented by 42 women. To improve their buffalo and cow milk production, the

government gave the group, a kit of mineral mixture and calcium liquid.

Poultry Breeding: Members of the community were informed about the government project Margh Ucher and were provided help in filling out the application to avail the benefit. The government chose four of the seven people who filled out the form and gave them 25 chicks and fodder and Rs. 2,000.

Employment

TCSRD runs various initiatives that help generate employment among the unemployed youth. Industrial training imparted through the ATS (Apprentice Training School) along with skill development has also enhanced the employability of candidates in organised as well as unorganised sectors. Towards the ultimate goal of enhancing the

employability and entrepreneurship abilities, TCSRD in collaboration with Rallis India, are committed to creating and promoting access to quality education and technical skills and competencies for members of the SC/ST communities. Further, to speedily enable these communities overcome the social discrimination that has prevented them from realising their potential as productive members of society, support is provided to the members from these communities for employment opportunities and as business associates, provided everything else (merit for employment; cost and quality for business associates) is equal.

Essential Amenities

Ensuring essential amenities for the disadvantaged sections of society is the 5th E of the Affirmative Action programme at Tata Chemicals.

TCSRD follows an integrated approach to mainstreaming the SC/ ST communities in all its initiatives focusing upon Natural Resource Management, Health, Hygiene & Sanitation, Elementary services for improving the quality of life, and Model Tribal Village.

Model Tribal Village

Model tribal villages is defined as a sustainable ecosystem where every individual has access to basic amenities, functional local governance systems and other essential resources to improve their level of well-being and happiness. The Model Tribal village intervention works on the holistic village development encompassing individual, sociocultural and economic dimensions ensuring that basic needs of its residents are fully met; disparities are reduced to a minimum and create an enabling environment for its residents.

Objectives

The objective of this intervention is to ensure integrated development of the selected villages.

Adequate infrastructure

All requisite infrastructure necessary for the socio-economic development needs are available. Eg: sanitation, safe drinking water, connecting road, electricity, house.

Improvement in socioeconomic indicators

 The identified socio-economic indicators, known as Monitorable Indicators, are to be improved so that the disparity between ST and non-ST population is eliminated and the level of indicators is raised to at least that of the National average

- All families should have food and livelihood security
- Water availability throughout the year
- All children should complete education at least up to the secondary level
- All factors leading to maternal and infant mortality are addressed and incidence of malnutrition, especially amongst children and women, is eliminated
- All HHs adopting carbon neutral practices

Approach for model tribal village

- Participatory and Collaborative Model: Company, NGO and tribal from respective village will work together for integrated tribal development
- Follow scientific way to identify needs and priorities of the Tribal
- Predesigned exit and sustainability plan
- Developing model which can be replicated in other locations
- Programme designed in a manner which addresses majority of UN Sustainable Development Goals and National priorities.

Locations of tribal villages

▶ 3300 Tribals from 8 villages

(Kalampada, Jawhar, Saraiwadi, Tadwadi, Mograj, Ambherpada, Chafewadi, Aghai)

- Saminagar, Cuddalore
- Mohul Nagar, near IC Pune

The focus areas of model tribal villages are as below:

- Promote women appropriate technologies (eg: improved pickle, improved chulla) to reduce their drudgery and contribute to improve their overall health
- Livelihood supported through Unique TARFAH (Transformative Action For Rural Development, Food Security & Animal Husbandry) model in Alliance with AllLSG (All India Institute of Local Self Governance) NGO partner for land owner villagers in Karjat. Under TARFAH, villagers do horticulture plantation, vegetable cultivation and floriculture on their land.
- Focus on improving health and education

During the pandemic, TCSRD in collaboration with Rallis initiated dissemination of Covid awareness related to prevention and precautions information among Tribal via introducing innovative tools like Covid posters, zic-zag puzzles, and street plays.

Achievement

Education

- Established Shikshan Ranjan Kendra (SRK) in each village covering 50 students per SRK.
- Academic performance improved by 25% and attendance by 90% among children.
- Parents appreciated the efforts especially during lockdown as SRK have gainfully engaged children in educational activities and improvement is visible among the students.

Health

- 250 families were covered under Kitchen garden.
 Kitchen garden kits were distributed to each and every household to address malnutrition issues. This has also become a secondary income source as families are selling extra produce in market.
- Keeping reproductive health for women in focus, monthly sessions were organised.

Livelihood

- 175 families covered under livelihood: Due to pandemic 100% women migration stopped. Male migration has reduced.
- Kitchen gardens: A potential source of income to supplement their livelihoods. Landholder families provided with horticulture plantation – TARFAH model – vegetable cultivation mainly focusing on addressing health issues of villagers through vitamins & nutrition available in vegetables.

Model Tribal Village (Mohul Nagar, Pune)

We have initiated work with the Katkari tribes in Mohul Nagar, Ambervet Village near IC Pune. Needs assessment study was conducted to understand present socio-economic condition of the village and to initiate other development activities, based on the need of the community.

Model Tribal Village (Saminagar, Cuddalore)

The Irular community residing in Saminagar village is one of the most marginalised communities in the region. They depend on fishing and insect catching for their livelihood. Due to poor economic conditions, lack of awareness, and parental care and due to social discrimination, the drop out level is very high among the students in this community.

We are working on the following areas:

Education

For reducing the dropout rate of the children in the village so that they complete their formal education. As an initial intervention we started Village Learning Centre at Saminagar village to support the students to complete their daily homeworks. In addition we introduced Natural Language Acquisition methodology to the VLC centre to make English language easy.

Livelihood

A women Self Help Group was formed and have been supported with capacity building training, bank linkages & conducting regular meetings etc. We also started a tailoring training centre inside the village to support the women of this community. The people especially women from this village have good potential and have a will to empower themselves.

Due to COVID -19 lockdown the villagers lost their livelihood and

struggled to manage their daily expenses. Ladies who got the training in the training centre started making masks to meet their basic needs and the current demand for masks. TCSRD linked this women's group with TCL to procure masks for their employees & contractors.

In future we are planning to implement various projects & awareness sessions to achieve holistic development of the village.

OUTPUT

- No. of households: 120
- No. of women trained on tailoring: 15
- No. of students that benefitted from the VLC centre & NAL project: 70

Volunteering Programme

Volunteering helps in connecting employees of a company with the community, and helps employees understand ground realities and challenges faced by society. It is an opportunity not only for the company's employees to give back to society but also for the community to know more about the company. Tata Chemicals has been promoting volunteering of its employees and their family members across locations. The volunteering programmes are designed to match the needs of the locations with the skills and competencies of the employees. They cover various aspects such as biodiversity conservation, skill development, education, agriculture development and health. During the year, Tata Chemicals, with support from TCSRD, organised multiple volunteering programmes in all locations. In Mithapur, the major focus was on the conservation of the environment and biodiversity. In Mambattu and Cuddalore a number of programmes were organised

with primary school children and women groups.

Youth engagement

Youth lays the foundation of any country's future. And to ensure the youth of India get the opportunities they deserve, TCSRD organises multiple interventions and events for their benefit. This includes Rural Youth Sports Camp and Competitive Exam Classes. During the year, 30 youth participated in the sports camp in athletics and 35 students were enrolled for the classes.

Relief work

 Gujarat: TCSRD team along with Nagarpalika in rural areas around Mithapur distributed over 3,000 ready to eat food packets as well as bottles of water during the heavy rains that caused havoc in the daily lives. Also, evacuation and emergency camp was set up to





evacuate the villagers of Rajpara on Bhimgaja Dam overflowing.

 Cuddalore, Tamil Nadu: TCSRD and other Tata companies in collaboration with local NGOs-ROAD and Care India provided 16,600 meals in 5 villages of Cuddalore district and 700 (20 litres) water canes, during Nivar and Burevi cyclones.

 Infrastructure support: In 2020-21, TCSRD supported the following need-based projects: construction and repair of road (5), community hall repair and support work (15), repair and renovation of schools (8), repair and renovation of Anganwadi (92).

		Volunteering hours	of all the locations	
č	Location Mithapur		No. of volunteers	No. of volunteering hrs
	Health & Education		86	476.2
	Biodiversity		339	2,975
$\widehat{\mathcal{T}}$	South			
	Cuddalore		54	195
	Mambattu		18	144
	Rallis		459	5,510
fiih	Maharashtra & Gujarat			
	Corporate		144	277
	TOTAL		1,100	9,577.2

CASE STUDY

Name of the Intervention: REDP, Affirmative Action Name of the Beneficiary: Rameshbhai Jivabhai Solanki Location: Arambhada, Dwarka, Gujarat



Before Mr. Rameshbhai joined the Affirmative Action programme, he was working as a labourer. However, what he was earning was insufficient to support his family, which includes his wife and four children.

He completed Rural Entrepreneurship Development Programme (REDP) training successfully within 45 days by following all the rules and regulation of Dalit Shakti Kendra. After completion of the technical training, he started working as an electrician in Arambhada village, post which he got a job as an electrician in the Okhamandal Nagar Palika. REDP training also instilled in him the confidence he needed, in himself and his skills, to put himself out there and take control of his life.

Today, he not only earns Rs. 8,500 per month from his Okhamandal Nagar Palika job, he is also an entrepreneur, earning extra income for his family. This income has helped to not only improve their standard of living, but has also allowed him to send his children to school so they can have a bright future. He also acts as a spokesperson to others belonging to the SC/ST communities, encouraging them to join TCSRD programmes.

COVID-19 Interventions

We have adopted a two-pronged approach to tackle this unprecedented situation of Covid-19 pandemic. One intervention focuses on supporting the government and the other one on supporting the local communities. The immediate priority was the relief support to the local communities during the lockdown.



FINANCIAL ASSISTANCE

101.23 lakhs to CM Relief Fund of TN, Gujarat, DC of Nellore, Tata Memorial Centre, SOS Children's villages of India, WWF, GP Varsoli, Guru Govind Singh hospital (Jamnagar)

FARM TO HOME

325 farmers are connected to 323 HHs of Mithapur & Dwarka, **47,350 kgs** of vegetables, fruits & grains sold



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COMMUNITY ENGAGEMENT

Awareness campaign run across 43 villages of Gujarat, Mambattu, Sriperumbudur and Cuddalore, 36,546 people from Okhamandal screened

MEDICAL ASSISTANCE



100 bed isolation ward at Mithapur hospital to supplement the Government's infrastructure requirement

- **500 PPE kits**, for frontline medical workers in Government hospital, near Sriperumbudur plant
- 1 ventilator to a government hospital in Cuddalore
- 100 full body gowns to staff of Government hospitals at Lote
- Manufactured and supplied more than 1.18 Million Litres to the Government of Gujarat and 600,000 Litres to BMC, Maharashtra

COMMUNITY LIVELIHOOD

2 lakh masks produced

- 1.3 lakh masks made by local SHGs
- **1 lakh masks** sold through Okhai website across India
- 51,200 masks distributed to police, community, drivers, security
- ▶ **1,000** N95 masks distributed to the district hospital through Collector at Cuddalore
- 6,500 masks distributed in Dahej, Lote and Seeds location
- 50,000 masks procured and in process of distribution Pan India

275 women earning livelihood

from mask and bag production

COMMUNITY SUPPORT

10,657 families from

vulnerable communities were supported with dry ration kits

- Driver kits consisting of (4 masks, soap, sanitiser) distributed to 1,124 drivers
- Mithapur Hygiene kits distributed to 8,539 families
- Mithapur Sanitiser kits distributed to 6,869 families

Animal adoption of **3 endangered species** from BNP, Bangalore

Some of our partners

Agriculture Development - Kisan Mela Ambuja Cement Foundation, Kodinar American India Foundation ATMA – Agriculture Department of Govt. Of Gujarat Auroville **BUDDY4STUDY Coastal Salinity Prevention Cell (CSPC)** CSA University of Agriculture & Technology, Kanpur, UP District Rural Development Agency (DRDA), Jamnagar **eNAM** Registration G.B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand **Government Agriculture Department, Uttar Pradesh Government of Gujarat, Irrigation Department Grow-Trees** Gujarat Life Sciences Pvt. Ltd. **Gujarat Forest Department** Gujpro Agribusiness Consortium Producer Company Ltd. (Gujpro) **Head Held High Foundation** Integrated Child Development Services (ICDS) Indian Agriculture Research Institute, Pusa, New Delhi International Union for Conservation of Nature (IUCN) Jagriti Sewa Sansthan Krishi Vigyan Kendra (KVK) Krushi Vikas Kendra, Jamnagar L&T Construction Skills Training Institute, Ahmedabad Maha FPO Federation, Maharashtra Maharashtra State Rural Livelihood Mission (MSRLM), Umed NABARD National Dairy Research Institute Sukhi Baliraja Initiative (SBI), Tata Trusts SVB Patel University of Agriculture & Technology, Meerut, UP Tagore Society for Rural Development **TATA Medical Centre** The Covenant Centre for Development (CCD) Water and Sanitation Management Organisation (WASMO), Jamnagar Wildlife Trust of India Women and Child Development Working Group for Women & Land Ownership (WGWLO), Gujarat

Summary of Expenditure

Project	Expenditure during the year 2020-21 (in Lakhs)				
Project	TCL/TCSRD	Agencies	Beneficiaries	Total	
Sustainable Resource Base & Biodiversity Initiatives	825.73	410.43	112.72	1,348.88	
Sustainable Livelihood Creation	708.28	54.44	2.90	765.62	
Improving Quality of Life (Health Care)	142.08	52.05	0.00	194.13	
Improving Quality of Life (Access to Education)	140.30	69.46	0.18	209.94	
Affirmative Action for SC & ST	48.83	26.71	0.07	75.61	
Relief Activity	27.21	0.00	0.00	27.21	
Administrative (Office & Miscellaneous)	132.60	0.00	0.00	132.60	
Total	2,025.03	613.09	115.87	2,753.99	

Project	Expenditure during the year 2019-20 (in Lakhs)				
rioject	TCL/TCSRD	Agencies	Beneficiaries	Total	
Sustainable Resource Base & Biodiversity Initiatives	1,437.70	211.89	179.85	1,829.44	
Sustainable Livelihood Creation	538.95	168.59	3.48	711.02	
Improving Quality of Life (Health Care)	77.81	0.00	0.26	78.07	
Improving Quality of Life (Access to Education)	119.76	2.25	0.26	122.27	
Affirmative Action for SC & ST	62.17	0.00	0.05	62.22	
Relief Activity	65.05	0.00	4.30	69.35	
Administrative (Office & Miscellaneous)	157.25	0.00	0.00	157.25	
Total	2,458.69	382.73	188.20	3,029.62	

Balance Sheet

egistration No. ame of the Public Trust alance sheet as at FUNDS AND LIABILI	F-115	Vide Kule	17(1)]		
ame of the Public Trust alance sheet as at FUNDS AND LIABILI					
FUNDS AND LIABILI	Tata Chemicals	Society for Rura	I Development		
and the second se	31st March, 20	The content of the second second			
and the second se			PROPERTY AND ASSET	e 1	
rust Funds or Corpus	TIES	AMOUNT (Rs.) 14,00,01,100	Immovable properties	3	AMOUNT (Rs.)
Balance as per last balance-	14,00,01,100		(Suitable classified giving	1.00	
sheet			mode of valuation)		
Adjustment during the year			Addition or deduction		
			(including those for depreciation) if any, during		
			the year		
		1/5			
Other Earmarked Funds		3,25,00,000	Movable properties		4,13,45,048
(Created under the	-		(Refer Annexure A)		
provisions of the trust-deed or scheme or out of the	â				
income)			Investments		100 55 25 25 25
and the second second second			Bank FDR - Mithapur		20,50,14,617
Depreciation Fund			(Suitably classified, giving mode of valuation)		
Sinking Fund	1.00		mode or valuation)		
Reserve Fund	3,25,00,000		26 - 26		
Any other Fund			Inventory		-
oans (secured or unsecured)			Loans & Advances (unsecured)	· · · ·	
Current Liabilities		1,11,74,107			187
(Refer Annexure D)	1,11,74,107	a secondaria da anta			
			Advances / Deposits		26,97,895
			To trustees		
Income and Expenditure Accou	int	7,25,11,954	To employees		
Balance as per last Balance	4,60,17,298		To contractors	•	
Sheet			To lawyers		
Add/(Less) :	2,64,94,656		To others	26,97,895	
Surplus or deficit as per income and Expenditure			(Refer Annexure B)		
Account			Income Outstanding		
	10-10-10-10-10-10-10-10-10-10-10-10-10-1		Rent	÷ 1	
			Interest	1.1	
			Other income	-	
			Cash and Bank Balances		71,29,602
			(Refer Annexure C)		
			(a) In current account or fixed	71,29,602	
			 (b) With the trustee (c) With the manager - Halida 	2	
			for mine and market a minute		
		25,61,87,162	Total		25,61,87,162

Registration No. Name of the Public Trust	S.2.0 (2020)	[vide Rule	17(1)]		
	F-115	Society for Rura	Development		
Balance sheet as at	31st March, 20	18 million and a second second	Development		
selance sheet as at	Jast Hartin, 20				
FUNDS AND LIABILIT	TIES	AMOUNT (Rs.)	PROPERTY AND ASSET	S	AMOUNT (Rs.)
Trust Funds or Corpus		14,00,01,100	Immovable properties		
Balance as per last balance- sheet Adjustment during the year	14,00,01,100		(Suitable classified giving mode of valuation) Addition or deduction (including those for depreciation) if any, during the year	140	
Other Earmarked Funds		3,25,00,000	Movable properties		4,13,45,048
(Created under the provisions of the trust-deed	2	3,23,00,000	(Refer Annexure A)		4,13,43,040
or scheme or out of the income)			Investments		100 609030202
			Bank FDR - Mithapur		20,50,14,617
Depreciation Fund			(Suitably classified, giving mode of valuation)		
Sinking Fund Reserve Fund	2 25 00 000		incue or resourcesty		
Any other Fund	3,25,00,000		Inventory		
Loans (secured or unsecured)			Loans & Advances (unsecured)	0	1.00
				- I	
Current Liabilities		1,11,74,107		- 1	
(Refer Annexure D)	1,11,74,107		Advances / Deposits		26,97,895
			To trustees		20,97,093
Income and Expenditure Accou		7,25,11,954	To employees		
Balance as per last Balance	4,60,17,298	1,20,22,000	To contractors		
Sheet			To lawyers		
Add/(Less) : Surplus or deficit as per income and Expenditure	2,64,94,656		To others (Refer Annexure B)	26,97,895	
Account			Income Outstanding		
			Rent		
			Interest		
			Other income	-	
			Cash and Bank Balances (Refer Annexure C)		71,29,602
			(a) In current account or fixed	71,29,602	
			(b) With the trustee	- destage	
			(c) With the manager - Halida		
Total		25,61,87,162	Total		25,61,87,162

Governing Board Members, TCSRD employees and TCL supporting members

GOVERNING BOARD MEMBERS

Sr no.	Name	Address	Gender	Occupation	Position in Board
1	Dr. Y.K. Alagh	45, Surdhara, Near Saal Hospital, Thaltej, Ahmedabad – 380054	Male	Chancellor, Center University of Gujarat and Vice Chairman Sardar Patel Institute of Economic and Social Research, Ahmedabad	Patron member& Hon. Trustee
2	Dr. Janki Andharia	Tata Institute of Social Science (TISS), P.O.Box 8313, Deonar, Mumbai – 400 088	Female	Professor, Jamshedji Tata Centre for Disaster Management	Patron member and Hon. Trustee
3	Mr. Zarir Langrana	Tata Chemicals Ltd, Lodha Excelus, 23rd floor, New Cuffe Parade, Sewri - Chembur Road, Wadala, Mumbai - 400037	Male	COO, Chemicals Business, Tata Chemicals Ltd	Hon. Vice Chairman & Hon. Trustee
4	Mr. Ashish Mehta	Rallis India Limited, Lodha Excelus, 23rd floor, New Cuffe Parade, Sewri - Chembur Road, Wadala, Mumbai - 400037	Male	CFO, Rallis India Ltd	Hon. Treasurer and Trustee
5	Mr. R. Mukundan	Tata Chemicals Ltd, Bombay House, 24 Homi Modi Street, Mumbai – 400 001	Male	Managing Director, Tata Chemicals Ltd	Hon. Chairman & Hon. Trustee
6	Mr. R. Nanda	Tata Chemicals Ltd, Bombay House, 24 Homi Modi Street, Mumbai – 400 001	Male	CHRO, Tata Chemicals Ltd	Hon. Trustee & Member on behalf of Tata Chemicals Ltd
7	Mr. Prantik Sarkar	Tata Chemicals Ltd, Mithapur, Dist. Devbhoomi Dwarka – 361345	Male	Sr. Manager, Tata Chemicals Ltd	Hon. Assistant Secretary and Member
8	Mr. V. Shankar	Rallis India Ltd, Lodha Excelus, 23rd floor, New Cuffe Parade, Sewri - Chembur Road, Wadala, Mumbai - 400037	Male	Managing Director & CEO, Rallis India Ltd	Patron member and Hon. Trustee
9	Ms. Alka Talwar	Tata Chemicals Ltd, Lodha Excelus, 23rd floor, New Cuffe Parade, Sewri-Chembur Road, Wadala, Mumbai-400037	Female	Chief CSR & Sustainability Officer, Tata Chemicals Ltd	Hon. Secretary and Trustee
10	Dr. Y S P Thorat	Planet Godrej, Tower 4, Flat 3702, Keshavrao Khade Marg, Mumbai – 400011	Male	Retd. Chairman, NABARD	Patron member& Hon. Trustee
11	Mr. Shankar Venkateshwaran	C 181, Sarvodhya Enclave, New Delhi – 110017	Male	Chief of Tata Sustainability Group, Tata Sons	Patron member and Hon. Trustee
12	Mr. Amit Chincholikar	Tata Consumer Product Ltd.	Male		Patron member and Hon. Trustee

- Certified that no board members received any honorarium or fee for their services to TCSRD
- Board meetings during 2020-21 were held on 16th July, 17th September, 19th January, 31st March. At the board meeting held in July- 8, September 12, January 10, March 12 members were present
- TCSRD is registered as a Society under the Society Registration Act 1860, vide number Gujarat/ 136/ Jamnagar dated 11/01/1980. It is also registered as a Public Charitable Trust by the Deed of Declaration Trust No. F115/ Jamnagar dated 11/01/1980
- TCSRD has been granted registration under section 12A (a) of Income Tax Act (Exemption), New Delhi, vide letter no.66/T_26/CIT.R/80-81 dated 11/06/1980
- TCSRD is recognised under Section 80-G (5) (VI) of the Income Tax (Exemptions) Department, New Delhi, vide letter no. s a.a.j.m/tk/II (b)/80G01-76/08-09/1106

DETAILS OF TCSRD STAFF AND THEIR RANGE OF SALARY

Staff (per month)	Male	Female	Total
Less than 5,000	-	-	-
5,000-10,000	-	-	-
10,000-25,000	17	11	28
25,000- 50,000	10	2	12
50.000-1,00,000	3	1	4
Greater than 1,00,000	-	3	3
Total	30	17	47

Slab of gross salary in Rs. plus benefits paid to:

Details of International travel of Staff and Board members at the expense of the organisation - None

STAFF MEMBERS

Administrative and support staff		Mr. Anilsinh R. Vadher				
Programme Staff						
Mithapur		Haldia	TCL Mumbai	Okhai Mithapur		
Mr. Chanu Dabhi Mr. Harishchandra Bhimani Mr. Ajitsinh Babriya Ms. Kiran Kaya	Ms. Rani Vikma Mr. Ranjit Odedara Ms. Rekha Vairya Mr. Samat Chamadiya Mr. Sanjay Vadher Mr. Navghan Jagatiya Mr. Rajmal Nayani Mr. Ranmal Chamadiya Mr. Somat Gojiya Ms. Rashika Saini Mr. Vijendra Shawlaker Mr. Vaghabha Ker Ms. Kavita Yadav Ms. Mala Vithlani Ms. Sunita Nayani Mr. Jashrajbha Sumaniya	Mr. Deb Kumar Acharya	Ms. Alka Talwar Mr. Koushal Kumar Sinha	Ms. Anupama Vaghela Mr. Parakramsinh Vadher Ms. Lakhuben Mori		
		South	Ms. Brinda Alankar	Ms. Khatijaben Sanghar Ms. Laxmiben Karmta		
Ms. Mamta Makwana			TCL Babrala	Ms. Sabhaiben Mori		
Mr. Jayesh Ramavat Ms. Rajuben Parmar		Ms. Lakshmi S Mr. Agnivesh Mandala	Mr. Harpal Singh Mr. Mukesh Babu	Ms. Ramiben Nagesh Ms. Rekhaben Takodara Ms. Mushrat Chamadiya Ms. Bharmiben Bhangra Ms. Rukshanaben Ajab		
Mr. Mahobat Manek Mr. Dhaval Bhayani		Okhai Ahmedabad	Solanki			
Ms. Bhavna Kanzariya Mr. Dungarbha Jam Ms. Fatima Rathod		Mr. Vijendra Chavda Mr. Rajesh Parmar Mr. Pravin Parmar Ms. Priti Takodara Ms. Hardika Yadav Ms. Krupa Shah Ms. Juhi Giri Mr. Rajesh vankar Ms. Sejal Desai Mr. Swetal Patel Ms. Mohini Neware Ms. Jigna Bhanusali Ms. Aarti Panchal				
			TCL Mithapur	Ms. Jarina Kurshi Ms. Hansaben Hathiya		
Ms. Hasina Bloch			Mr. Prantik Sarkar Mr. B. J. Sachdev	Ms. Reshma Shaikh Ms. Lalitaben Parmar		
Mr. Nitin Ghedia Mr. Pacha Hathal			Mr. H V Kamani			
			Mr. Satish Trivedi Ms. Rehana Sheikh			
Mumbai	Farrukhabad		Mr. Pankaj Varia			
Ms. Prabha Gourh Mr. Biswajeet Sahu	Mr. Naresh Pal Mr. Suresh Vikram Mr. Mahendra Singh Mr. Sarvendra Singh Mr. Neelesh Pathak Mr. Radha Krishna Diwedi		Mr. Ramji Nayani			
			TCL Ahmedabad			
Ms. Manjusha Kadam Ms. Ruchi Shah Mr. Ajay Turkane Ms. Suporna Noronha			Ms. Kirti Poonia Ms. Nusrat Dayamakumar			

CONTRIBUTE TO MAKE A DIFFERENCE

Contribute to a cause close to your heart

TCSRD, from its inception has been working towards bringing social equity by implementing need-based programmes in its area of intervention. The impact of various programmes undertaken by TCSRD has been mentioned in detail in this annual report. Below are the causes to which you can contribute as much as possible. Each drop in the ocean counts and every contribution makes a difference.

Educating people

Children of salt work labour cannot afford tuition, books or uniforms. Fund education to teach their children how to read, write and stay safe.

Health & medical

By providing funds for deworming pills, mobile health clinics, eye camps and for refurbishing the community clinics, we can help people

to live healthier lives.





Wells & clean water

There is no life without water. Building check dams, roof rain water harvesting structure and other water collection programmes give security and hope

Hunger & poverty Help farmers buy seeds

and learn effective

to those with unsafe water.

Micro loans & finance

Provide entrepreneurs with loans they need to succeed. The fund would help young entrepreneurs to become self-reliant.

Disaster response

Help families pull through tragedy. The disaster fund assists people who face political upheaval or natural calamities.



Vocational training

Train people to learn a trade or produce a product. These skills help people to become self-reliant both financially and non-financially.



Where most needed

Help TCSRD in many ways. A general fund contribution goes to programmes that demand immediate attention

Contributions to the above mentioned causes are purely voluntary. Those interested may contribute	
by way of cheque / demand draft in the name of 'Tata Chemicals Society for Rural Development'.	
All contributions are exempted from tax under Section 80G of the Income Tax Act, 1961	

Yes, I would like to donate towards

Education Poverty alleviation	Micro finance	Vocational training	Health	Water management	Disaster management	
General fund	I would like	to support TCSR	D by Cheque /	Demand Draft		
Issuing bank name:						
Cheque / Demand draft Ref. no:						
For any communication, please contact me:						
Name:			Мс	bile:	<u>-</u>	
Address:						
City:	Pin code:	·	Email:			

Please mail your cheque at: Tata Chemicals Society for Rural Development, Mithapur, Okhamandal, Dev Bhoomi Dwarka, Gujarat- 361345 Tel: 02892-675336

The value of a man resides in what he gives and not in what he is capable of receiving." — Albert Einstein

ABOUT TATA CHEMICALS SOCIETY FOR RURAL DEVELOPMENT

Tata Chemicals Limited (TCL) established the Tata Chemicals Society for Rural Development (TCSRD) in 1980 to promote its social objectives for the communities in and around Mithapur, Gujarat where its facility is located. The service were further extended to the communities in and around Cuddalore (Tamil Nadu) and Mambattu (Andhra Pradesh).

The Society works to protect and nurture the rural populations in and around TCL's facilities. It helps them achieve self-sufficiency in natural resource management, provide livelihood support and help in building of health and education infrastructure.

Taking into account the different geographical spread of the three regions and their individual subcultures, different environmental, economic and social development programmes have been planned and implemented in these regions.



Tata Chemicals Society for Rural Development (TCSRD)

TCSRD is registered as a Society under the Society Registration Act 1860, vide number Gujarat/136 /Devbhumi Dwarka dated 11/01/1980 and also registered as a Public Charitable Trust by the Deed of Declaration Trust No. F115/ Devbhumi Dwarka dated 11/01/1980

https://www.tcsrd.org/

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