



THE GLOBAL GOALS
For Sustainable Development



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INTRODUCTION

We are experiencing sweeping social and environmental changes across geographies, impacting lives and livelihoods. These changes call for need-based interventions, supported by the active participation of diverse stakeholders; interventions that deliver measurable outcomes bringing lasting change. The Sustainable Development Goals (SDGs), also known as the Global Goals, launched in 2015, are a universal call to action to end poverty, protect the planet and ensure that people enjoy peace and prosperity. The SDGs provide business an unprecedented opportunity to make positive impact in the lives of many.

This document illustrates how the Tata group companies’ activities are contributing to the realisation of the SDGs either through the business or CSR. Besides, it describes the measurable impact that these activities can achieve to improve the quality of life, and enhance stakeholder value across communities they touch. The SDGs have now become a blueprint to help achieve and contribute to corporate responsibility.

The Tata group contributes to the realisation of the SDGs by supporting sustainable and meaningful actions in the communities and in which it operates. The group also employs sustainability levers in its business operations and offers products and services that help create value for customers and stakeholders.

What are SDGs?



The Sustainable Development Goals (SDGs) are a new, universal set of goals, targets and indicators that UN member states are expected to use to frame their development agendas and policies, with a 2030 deadline for attainment. It is the UN's most ambitious vision for sustainable development yet and will reshape the practice of development globally, including the role of the private sector.

17 SDGs



Why are the SDGs Important for Business?

Businesses have been facing increasing expectations from stakeholders in the past few years to include social, environmental and governance dimensions in their corporate strategies.

They have started to define and formulate broader responsibilities, and sustainability has become an increasingly critical consideration for corporations. The 2030 Agenda for Sustainable

Development and the SDGs provide a good opportunity for businesses to align their strategic goals with globally agreed sustainability principles.

How Can Business Contribute to the SDGs?

Businesses are essential drivers for sustainable development and human prosperity especially because they

have the resources to push growth by providing employment, technology, innovation, research and funding.

Business can leverage these capabilities and catalyse sustainable, profitable growth.

Tata group and the SDGs

The Tata group believes that the role of business is not just about giving back to society from its profits but also about ensuring that the processes it employs to earn these profits are ethical, socially

responsible and environmentally sound. Sustainability is built into the Tata group's business processes through a well-defined policy, a value system committed to social expenditure and

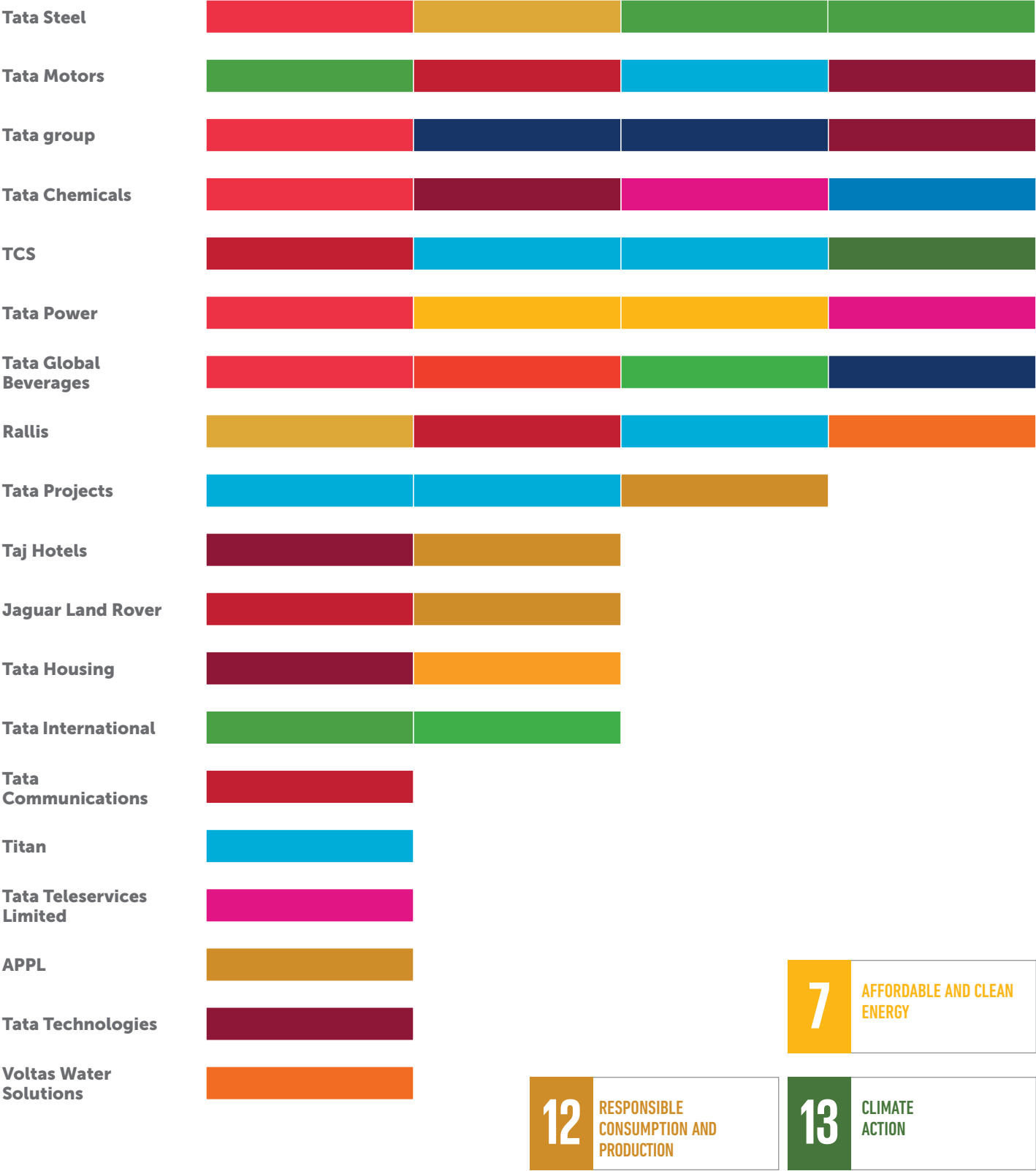
environmental preservation, and through a governance structure that engages employees and other key stakeholders.

Scope of the Document

This document aims to capture the various initiatives of the Tata group companies aligned to the SDGs. The examples would describe specific activities that have already been

completed or are underway and have resources being devoted to them that relate to the SDGs.

SDGs Heatmap



17 SDGs

This map shows how various initiatives of the Tata group companies are aligned to the SDGs to ensure continued commitment, attract broad support for these efforts and provide transparency and accountability for all stakeholders. The SDGs Heatmap showcases the examples that have been captured as part of this document and is not an exhaustive compilation of all the initiatives from Tata group companies.



Foreword



Natarajan Chandrasekaran
Chairman, Tata Sons

THE SUSTAINABLE DEVELOPMENT GOALS (SDGs) AND THE 2030 DEVELOPMENT AGENDA IS THE U.N.'S MOST AMBITIOUS VISION FOR SUSTAINABLE DEVELOPMENT, YET. THIS IS EXPECTED TO RESHAPE THE PRACTICE OF DEVELOPMENT GLOBALLY. THE SDGs RESULT FROM A PROCESS THAT HAS BEEN MORE INCLUSIVE THAN EVER, WITH THE PARTICIPATION OF GOVERNMENTS, BUSINESSES, CIVIL SOCIETY ORGANISATIONS AND CITIZENS. FULFILLING THESE AMBITIONS WILL TAKE AN UNPRECEDENTED EFFORT BY ALL STAKEHOLDERS IN SOCIETY – AND THE PRIVATE SECTOR HAS A VERY IMPORTANT ROLE TO PLAY IN THE PROCESS.

Our sustainability initiatives aim to be relevant to local, national and global contexts. We keep in mind the most disadvantaged communities, based on globally-agreed sustainable development principles and implement programmes to benefit them, in partnership with a range of stakeholders.

Global challenges – ranging from climate change, refugee, water and food crises, to poverty, urbanisation, and political instability and widening gender inequality – require urgent solutions. Navigating through these critical developments will require the private sector to not only understand and respond to these emerging mega trends but also demonstrate a deep commitment to governance, transparency, ethics and values that consumers and other stakeholders are increasingly expecting of them. Businesses must engage in developing sustainable products and services and implement responsible practices throughout their business lifecycles. Therefore, more than ever before, companies need to build more resilience and responsibility in their business systems that will help create value for all.

At the Tata group, our sustainability efforts reflect our Founder's philosophy, "In a free enterprise, the community is not just another stakeholder in business but is in fact the very purpose of its existence." Our sustainability initiatives aim to be relevant to local, national and global contexts. We keep in mind

the most disadvantaged communities, based on globally-agreed sustainable development principles and implement programmes to benefit them, in partnership with a range of stakeholders.

The Sustainable Development Goals (SDGs) and the 2030 development agenda is the U.N.'s most ambitious vision for sustainable development, yet. This is expected to reshape the practice of development globally. The SDGs result from a process that has been more inclusive than ever, with the participation of governments, businesses, civil society organisations and citizens. Fulfilling these ambitions will take an unprecedented effort by all stakeholders in society – and the private sector has a very important role to play in the process.

The Tata group has been a partner to the SDGs campaign which was launched in 2015. More recently, the Tata group also contributed to different local and global discussions on the SDGs. Through this report – a first-of-its-kind for a group of our size – the information provides a glimpse of how our group companies are contributing to the SDGs either through responsible business practices,

product innovations or CSR. It is not meant to be exhaustive or detailed but it does convey the range of initiatives being spearheaded across the globe. We are not alone in these efforts as our most valuable asset, our employees, partner us in these initiatives.

This document is testament to the fact that regardless of the size of the company or its industry, the private sector can contribute to the SDGs significantly. While the scale and scope of the SDGs is unprecedented, the fundamental ways that business can contribute remains unchanged.

There is little doubt that the SDGs provide an opportunity for us to improve our world collectively. This is the change that is needed for communities and businesses to survive and thrive, now and in the future.

Natarajan Chandrasekaran
Chairman, Tata Sons

Making SDGs work for the Tata group



Shankar Venkateswaran
Chief, TSG

MANY ARE OVERWHELMED BY THE 17 GOALS AND 169 TARGETS THAT MAKE UP THE SDGs, BUT SOMETHING THAT TRIES TO ADDRESS THE CHALLENGES OF HUMANITY LIVING IN SPACESHIP EARTH WILL BE COMPLEX, ESPECIALLY WHEN THESE GOALS HAVE BEEN DEVELOPED IN SUCH A COMPREHENSIVE MANNER. BUT THIS PROCESS AND COMPLEXITY IS ALSO ITS STRENGTH – IT COVERS EVERY POSSIBLE CHALLENGE THAT WE FACE AND THAT BUSINESSES MUST CONTRIBUTE TO AND READY THEMSELVES FOR.

Why SDGs matter

What makes the SDGs unique over several UN processes and covenants that preceded it was that it was developed with the active participation of all stakeholders – national governments, international agencies, civil society and business. As co-creators, this makes it as much our goals as anyone else’s!

Many are overwhelmed by the 17 goals and 169 targets that make up the SDGs, but something that tries to address the challenges of humanity living in Spaceship Earth will be complex, especially when these goals have been developed in such a comprehensive manner. But this process and complexity

is also its strength – it covers every possible challenge that we face and that businesses must contribute to and ready themselves for.

SDGs and the Tata group

We as the Tata group see SDGs as an excellent framework to build resilience into our respective businesses, founded in the belief that communities are the very reason for our existence, to paraphrase our founder’s words. Several Tata companies – Titan, Tata Teleservices, Vistara to name just 3 – actively participated in the launch of the SDGs. The Tata Sustainability Month 2016 was built around demystifying them and the monthly TSG newsletters

We as the Tata group see SDGs as an excellent framework to build resilience into our respective businesses, founded in the belief that communities are the very reason for our existence, to paraphrase our founder’s words.

on the SDGs are designed to inspire and help companies apply these SDGs on a day-to-day basis.

This publication is yet another milestone in this journey. Some interesting features are:

- About 45 per cent of the case studies showcase how companies contribute to the SDGs simply by the way they run their businesses, thus demonstrating that this is mainstream
- About 40 per cent of all case studies featured in the document focus on rural interventions
- Close to 30 per cent of all case studies captured group companies’ and institutions’ efforts towards women and youth empowerment
- Most geographies in the Tata world contribute to the SDGs. Examples abound from India, East Africa, North America, United Kingdom, Europe and South-East Asia.

Deepening the connect with SDGs

So, how do we make SDGs work more for the group? Based on global experiences, some tried-and-tested approaches are given below that all companies can follow.

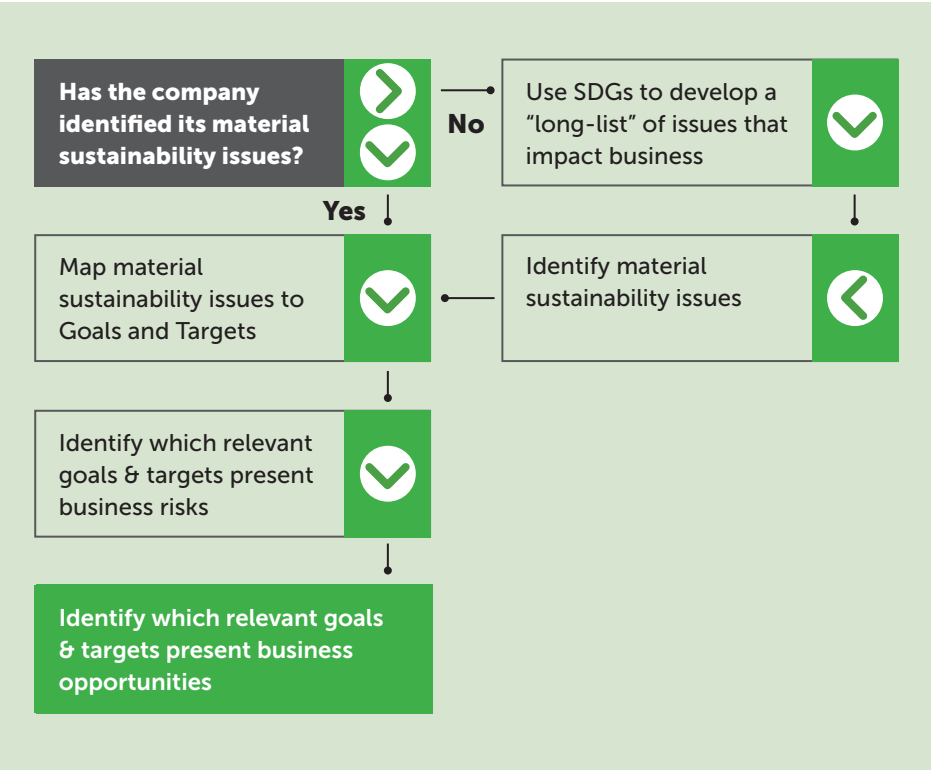
Step 1: Examine SDGs from a business risks perspective

All companies should go through all the SDGs and identify:

- If there are any Goals or Targets that the operations of the company can adversely or negatively impact
- If there are, what steps has the company taken or plans to take that can mitigate these impacts.

Step 2: Determine which SDGs are relevant to your company’s core business

Not all 17 goals and 169 targets are equally relevant to all companies. The first step is to determine which ones are. Companies need to prioritise them and the flowchart below suggests a process for this:



Step 3: Determine which SDGs are relevant to your CSR activities

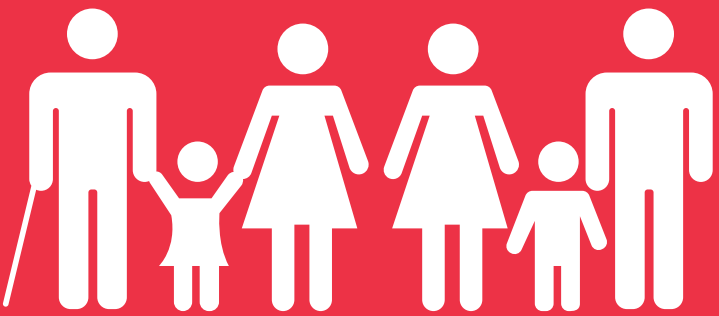
A company’s CSR activities are designed to meet the development needs of the communities that it serves. The Goals and Targets provide an excellent framework to determine this. Here is how:

- Where a company has a clearly defined CSR strategy with goals and targets: In such cases, companies should determine which SDGs and targets that this strategy is designed to address and ensure that its KPIs

and targets are aligned with the SDGs. This will make it easier to report the company’s contribution to the specific goals and targets

- Where a company’s CSR strategy is still under development: In such cases, the SDG framework provides a set of goals and targets and hence activities that the company can contribute to. In the case of companies operating in India, care must be taken of course to ensure that these activities also align with Schedule 7 of the Companies Act.

GOAL #1



NO POVERTY

End poverty in all its forms everywhere

Eradicating poverty in all its forms remains one of the greatest challenges facing humanity. While the number of people living in extreme poverty has dropped by more than half – from 1.9 billion in 1990, to 836 million in 2015; too many are still struggling for the most basic human needs.

TARGETS under Goal #1

- 01.** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day

02. By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

03. Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable
- 04.** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

05. By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

POVERTY DROP

1.9 bn 1990



836 mn 2015

- 06.** Ensure significant mobilisation of resources from a variety of sources, including through enhanced development co-operation, in order to provide adequate and predictable means for developing countries, in particular least developed countries,

07. Create sound policy frameworks at the national, regional and international levels, based on
- to implement programmes and policies to end poverty in all its dimensions

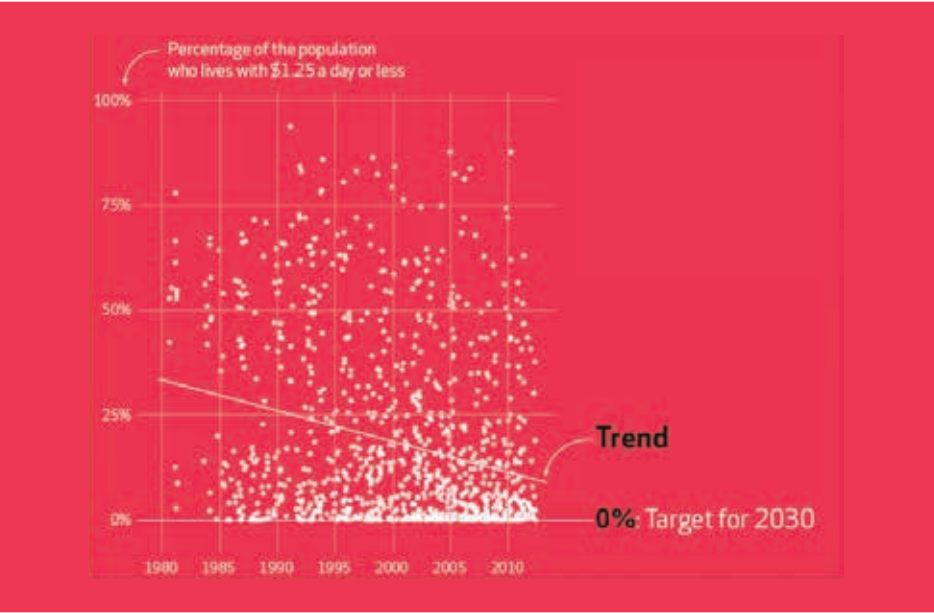
pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.

WHY Goal #1 matters?

- 01. Extreme poverty in the world**
One in 10 people live on less than \$1.90 a day

02. Need for balanced growth
\$8 trillion in infrastructure investment is required for inclusive growth in Asia from 2010 to 2020

03. Widespread displacement
42,000 people per day abandoned their homes due to conflict in 2014.



Despite progress under the Millennium Development Goals (MDGs), approximately 17 per cent of the world's population - more than 1 billion people - still live at or below \$1.25 -per day.

How will we get this down to 0 per cent by 2030?

BUSINESS & Goal #1: What's the connect?

Certain groups are disproportionately represented among the poor, and face additional constraints. These include women, persons with disabilities, children, and indigenous people.

Businesses should ensure that they meet their responsibility to respect human rights, including the rights of these groups.

Proactively deploy inclusive business models, innovative products and/or services that better meet the needs of such groups.

Leverage the unique perspectives of these groups as consumers, employees, suppliers and distributors in the value-chain, and community members.

BUSINESS & Goal #1: What's the Connect?

Beyond income, business can influence many other dimensions of poverty:

Limited opportunities	Food/nutrition insecurity	Access to education	Limited capabilities	Access to sanitation	Access to healthcare	Low empowerment	Personal security
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Business' role in poverty eradication also should also address framework conditions of poverty, for example, by engaging in policy dialogue for the provision of basic goods and services where they operate.

OPPORTUNITY for Business

An untapped customer base offers business potential in terms of demand and low-cost production

Businesses need to focus on collaboratively designing, manufacturing and deploying processes to customise products to meet the needs of the poor.

UNTAPPED CUSTOMER BASE
20%
in developing countries who live below the poverty line

LOW-COST PRODUCTION
50%
global vehicle production capacity will come from developing markets by 2050

How can business CONTRIBUTE to Goal #1?*

01. Develop products and services tailored for poor customers (e.g. mobile-based money transfer services for unbanked consumers)

02. Improve access to basic goods and services (e.g. through core business, policy dialogue and social investment)
03. Recruit, train and employ local community members and integrate them in the value chain (as producers, suppliers, distributors, vendors)

04. Invest in business-driven poverty eradication activities (e.g. develop living wage policy)
05. Partner with civil society networks to provide education and entrepreneurial skills training.

* The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Global Beverages

CASE STUDY 1

'Gaon Chalo' Initiative for Rural Livelihood

Tata Global Beverage's (TGB's) 'Gaon Chalo' initiative started in 2006 in the northern Indian state of Uttar Pradesh. It is a rural distribution initiative where villagers are motivated to sell Tata Tea products in their local communities. Not only did this help in boosting rural income, it also solved the company's problem of tackling the final leg of rural distribution. Currently, 'Gaon Chalo' is present in 18 Indian states with direct reach across 70,000 villages.

What did Tata Global Beverages do?

- This rural distribution initiative was driven through channel partners: rural distributors, mobile rural distributors and rural dealers. A combination of multiple channels, including the super-stockist network, wholesale channel and village *haats*, were engaged in the initiative
- It leveraged NGO penetration in rural Uttar Pradesh through which rural entrepreneurs were identified and were asked to supply to rural retailers
- The identified project affiliates were then provided Tata Tea at the rates which gave them attractive margins on the Maximum Retail Price (MRP)
- The initiative also worked with Self-Help Groups (SHGs) for deeper penetration and the possibility of making a larger impact.

Challenges

The main challenge inherent in the project was to adopt a sustainable yet cost-effective model to leverage rural India's potential.

Project impact

- TGB markets its mass brands such as Kanan Devan and Chakra through 'Gaon Chalo' initiative
- Tata Tea's consolidated market share from rural areas rose from 18 per cent to 26.6 per cent
- Limited fluctuations in sales were seen due to direct access to the rural retailers, creating a cost-effective brand building platform and the flexibility to address the complexities of local markets
- An additional 20,000 retailers in 10,000 villages were brought into the Tata Tea fold.

Key success factors: What worked?

- The idea was the brainchild of a member of the sales team and was driven by the business team with dual objectives to expand the rural market and to generate livelihood for rural retailers
- The approach utilised multiple channel partners and support from NGOs to achieve scale.

GOAL# 1 IMPACTS

- Income
- Employment

VALUE LEVERS FOR THE COMPANY

- Access to rural market
- Building the brand



'Gaon Chalo' is present in 18 Indian states with direct reach across 70,000 villages. It enables a strong platform for generating rural employment for rural youth, women, the underprivileged, the differently-abled and SHGs.

CASE STUDY 2

Improving the Livelihood of Farmers through the ‘Samridhi’ Programme

Tata Power endeavours to promote the importance of a scientific approach to agricultural practices among local farmers in and around its project areas. To achieve this, it has been implementing a sustainable agriculture programme – ‘Samridhi’, targeting local landless labour and marginalised farmers. The objective of the programme is to promote appropriate technology, which would help improve farmers’ livelihoods and earnings. More than 1,000 farmers have benefitted under this programme.



What did Tata Power do?

- The programme assisted farmers by creating awareness on superior farming practices aimed at improving crop yield
 - It guided farmers on the selection of the crop, seed treatment and the right techniques of sowing and cultivation of seeds
 - It developed a sustainable package of practices for the Kharif and Rabi crops and introduced new crops that are less labor-intensive and yield higher returns
 - It also implemented a farmer school, “Kisan Sheti Shala”. It educates farmers on soil testing, land preparation, water management, and selection and treatment of seeds, among others. The ASEA (Agriculture Eco-System Analysis) technique taught to farmers improved monitoring of plant growth.
- Tata Power runs the programme as part of its CSR initiative. It helps maintain the programme’s social license to operate within the community around its power plants
 - The programme operates across 28 villages in Maval and Karjat talukas benefitting about 1,200 farmers
 - The programme allows the farmers to move away from the traditional form of agriculture, encourages experimentation and promotes growth
 - The programme helps reduce investment cost for farmers (cost of seeds, fertilizers). The traditional method requires 40 Kg of seeds per acre when compared with 5 Kg of seeds in the recommended practices
 - The yield increased by 67 per cent and cumulative income rose to ₹ 53 lakh in these villages in the last Kharif season, against no income in the previous years.



Key success factors: What worked?

The farmer school “Kisan Sheti Shala” trained farmers on the new techniques and their benefits, which facilitated effective implementation of best practices on the farm.



Project impact



Challenges

Adoption of recommended practices by farmers and moving away from traditional ways of farming.

GOAL# 1 IMPACTS

- Income
- Technical know-how

VALUE LEVERS FOR THE COMPANY

- Social licence to operate



CASE STUDY 3

Supporting Micro Enterprise in Magadi, Kenya

Tata Chemicals, Magadi (TCM) is supporting micro enterprise development in Magadi, Kenya through a cooperative society created jointly with the community, since 2004. The Magadi Multipurpose Cooperative Society has more than 1,000 local community members. Tata Chemicals Magadi awards contracts for cleaning, transport and maintenance services to the cooperative.



What did Tata Chemicals do?

- Tata Chemicals assisted in setting up of the Magadi Multi-purpose Cooperative Society and provided continued support
- The programme provides capacity building to all members of the Cooperative Society
- It awarded cleaning, civil, transport and general contracts to the Cooperative Society
- Outside the Cooperative, TCM is also facilitating development of other business opportunities to the Cooperative such as tourism and diversification of livelihood.



Key success factors: What worked?

TCM runs a strong community development programme with the communities. The Company’s partnership with the community was intensified after the severe drought of 2000. The trust the community places in the Company and the existing relationship helped in the successful roll-out of the Cooperative.



Project impact

- TCM was able to procure services locally and it also helped in maintaining its social licence to operate within the community
- The main purpose of establishing the Cooperative was to economically empower the community by engaging them in income generation activities. It started slowly and developed into a platform for employment creation as well as giving dividends to its members annually
- The Cooperative became profitable after just nine months of operations and paid out 100 per cent of the dividends to its members
- The Cooperative grew from the initial 12 members to the current membership of about 1,000 community members
- The Cooperative also provides services to other leading companies besides TCM. It also provides credit and saving schemes to its members.

GOAL# 1 IMPACTS

- Income
- Employment

VALUE LEVERS FOR THE COMPANY

- Local service provider
- Social licence to operate



Challenges

TCM in Magadi, Kenya lies deep inside lands reserved for the Maasai tribe, first sealed through agreement by the colonial British Government in 1911. The tribe has always had great expectations from the company and the company strives to fulfill these.

CASE STUDY 4

Tata Affirmative Action Programme (TAAP)

Despite India’s record of rapid economic growth and poverty reduction over recent decades, rising inequality is a subject of concern. Poverty and social exclusion has its roots in historical divisions along lines of caste, tribe and gender. Culturally rooted systems perpetuate inequality, and prevent disadvantaged groups from taking advantage of economic opportunities. Affirmative Action (AA) refers to initiatives by companies in India in 4 Es (Employment, Employability, Entrepreneurship and Education) for greater inclusion of members of the Scheduled Castes and Scheduled Tribes.

What did Tata group do?

TAAP encourages Tata group companies to adopt AA in their enlightened self-interest, guided by their social context and business profile. Besides, the Company aims to exercise positive discrimination in employment or in creating business partners, without sacrificing merit, quality, or cost. It also requires Tata group companies to initiate, or build on existing, programmes for SC / ST youth in education and vocational training.

The motive has never been to encourage programmes that create AA ghettos but rather the objective has been to re-integrate the SC/ST communities into society and ensure equal opportunity to the disadvantaged sections.

Challenges

- Low awareness levels in the ecosystem on the status of SC/STs
- Mindset change of the ecosystem towards SC/STs
- Commitment and involvement from cross functions like Procurement, HR, Operations etc., other than just CSR department
- AA to be practiced not just as compliance but to be embedded in the DNA of the companies
- AA is different from business-as-usual.

Project impact

- Employment: There has been an increase in incremental employment of SC/STs in the Tata group over the year. In FY2016-17, the overall share of SC/STs was 10 per cent of the Tata group workforce (on-roll and contract in India) who declared their caste (some 20 per cent chose not to declare their caste), whereas it was 17 per cent in the incremental employment
- Entrepreneurship: 15 Tata group companies associated themselves with 440 entrepreneurs from SC/ST communities to supply products and services and have extended business worth ₹ 131 cr in 2016. The total business given to SC/ST entrepreneurs over five years is ₹ 458 cr
- Employability (Skilling): 20,000+ SC/ST youths trained in FY2016-17. Over 5 years more than one lakh got trained and about 40 per cent of those who were trained got employed (many companies are yet to track the post-training-status of the youths)
- Education in FY2016-17: 1 lakh SC/ST have been supported through scholarships, and other education programmes, thereby supporting 2.8 lakh students over five years.

GOAL# 1 IMPACTS

- Widening and strengthening the reach of TAAP
- Create sustainable livelihoods
- Providing access to quality education and holistic engagement
- Embed SC/ST entrepreneurs in company’s value chain – upstream and downstream
- Skill SC/ST youth in marketable trades and enable them to find jobs or become self-employed/entrepreneurs
- Culture preservation of tribal communities through support of ethnic art, sports, language and scripts, literature, music and dance of local tribes

VALUE LEVERS FOR THE COMPANY

- Inclusive and diverse workforce
- Sustained supply chain diversity

Key success factors: What worked?

- More leaders and managers showing commitment to the cause
- More than 50 per cent of all companies having a separate AA Committee/ Council, headed by their MD
- Regular, robust and comprehensive reviews of AA programmes by the leaders
- Clearly articulated AA strategy by the companies taking into account their social context and the needs of the communities
- Leveraging partnerships with like-minded organisations, Government agencies and group companies
- Sharing of good practices by the companies in various forums.

CASE STUDY 5

Improving Agricultural Productivity

Agriculture is the mainstay of the majority of the rural population in India. The agricultural economy of both Jharkhand and Odisha - states located in the eastern part of the country - is characterised by dependence on nature, low investment and low productivity. Mono-cropping with paddy as the dominant crop, inadequate irrigation facilities, and small and marginal holdings add to the woes of agriculturalists here.

What did Tata Steel do?

Considering the needs and agricultural practices of communities in and around its operational areas in Jharkhand and Odisha, Tata Steel initiated various activities to increase agricultural productivity and coverage area.

Since rice is the staple diet in the states of Jharkhand and Odisha, paddy cultivation is a norm for farmers using traditional methods for cultivation. For holistic agricultural development, however, technology is required by an institutional mechanism. Tata Steel stepped in to provide the essential facilities and technology-driven services to farmers to improve their agronomic practices for higher productivity.

Tata Steel began promoting paddy cultivation through a System of Rice Intensification (SRI) for the last five years. To build the capacity of farmers, Tata Steel conducted extensive training and encouraged farmers through village-level as well as institutional training programmes on SRI in partnership with Krishi Vigyan Kendra and the National Rice Research Institute.

Project impact

Starting with 250 farmers in FY2012-13, more than 8,000 farmers have been motivated and trained in FY2016-17 to adopt SRI method in the company’s operational villages in Jharkhand and Odisha. Due to the SRI method, paddy yield rose from 0.5-0.6 tonnes per acre (conventional method of paddy cultivation) to around 2.1 tonnes per acre.

Challenges

The major problem faced during this project was mobilising farmers and getting their buy-in to give a patch of their farmland for the SRI pilot.



GOAL# 1 IMPACTS

- Increase in yield
- Capacity building of farmers

VALUE LEVERS FOR THE COMPANY

- Brand enhancement
- Social licence to operate

Key success factors: What worked?

Actual demonstration conducted on the field through pilot project was beneficial. Villagers were convinced through counselling, discussion and meetings that the success of the initiative depended on unified efforts and their support. Experts from various state-run agriculture institutes were roped in for conducting the training sessions for the farmers on SRI.

GOAL #2



ZERO HUNGER

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture

A profound change in the global food and agriculture system is needed in order to nourish 795 million hungry and the additional two billion people expected by 2050.

- 05.** By 2020, maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including wild species, through soundly managed and diversified seed and plant banks at national, regional and international levels, and ensure access to and fair and equitable sharing of benefits arising from the utilisation of genetic resources and associated traditional knowledge as internationally agreed

06. Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development, and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular, in least developed countries

07. Correct and prevent trade restrictions and distortions in world agricultural markets including by the parallel
- elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round

08. Adopt measures to ensure the proper functioning of food commodity markets and their derivatives, and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

GOAL #2

WHY Goal #2 matters?

- 01. Hunger**

 - Globally, one person in nine today (795 million) is undernourished in the world
 - The vast majority of the world's hungry people live in developing countries
 - One in four of the world's children suffers stunted growth.
- 02. Food security**

 - 500 million small farms worldwide, most still rain-fed, provide up to 80 per cent of food consumed in a large part of the developing world
 - Agriculture is the single largest employer in the world, providing livelihoods for 40 per cent of today's global population
 - 70 per cent increase in output is required by 2050 to feed the world's population.
- 03. Food production**

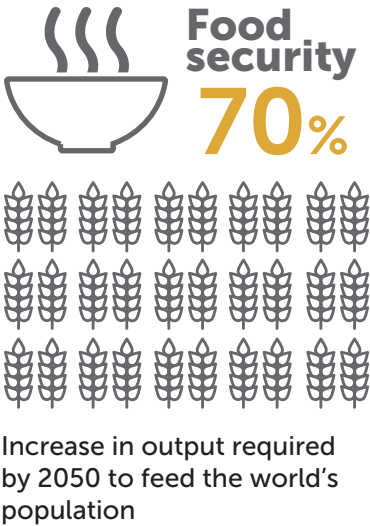
 - A profound change of the global food and agriculture system is needed if we are to nourish today's 795 million hungry and the additional 2 billion people expected by 2050.

TARGETS under Goal #2

- 01.** By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round

02. By 2030, end all forms of malnutrition, including achieving by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons

03. By 2030, double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment
- 04.** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality



BUSINESS & Goal #2: What's the connect?

Food and agriculture are at the heart of civilization and prosperity. Yet, agriculture faces multiple challenges such as:

A world population expected to grow to nine billion by 2050

- Water scarcity
- Smaller rural labour force
- Climate change
- Food wastage
- Urbanisation
- Soil quality degradation
- More-intensive diets
- Biofuel production

Changing lifestyles and more protein-intensive diets

BUSINESS & Goal #2: What's the Connect?

Business can contribute to solving these challenges, eradicating hunger and improving food and agriculture systems by:

Empowering small farmers

Increasing agricultural productivity

Increasing farmers' livelihoods

Rising consumer awareness

Increasing agricultural investment

Knowledge sharing

Improved access to safe, nutritious and sufficient food

Implementing sustainable practices and working in partnership with other actors throughout the agricultural value chain (including input, production, distribution and retail) will be key to the implementation of SDG2.

OPPORTUNITY for Business

\$62.9bn

Potential market size of organic fruits and vegetables by 2020

24% to 40%

Food loss in developing countries can be avoided via an adequate distribution network

- Develop and make accessible high nutrition food items
- Partner to set up a robust distribution channel
- Develop and roll out farming practices that improve productivity.

Businesses may need to focus on and invest in research and distribution infrastructure and develop global and local-level partnerships for scale and reach.

How can business CONTRIBUTE to Goal #2?*

01. Encourage and demonstrate the continued viability of small scale farming. Futher, sustain agricultural communities by developing partnerships with co-operatives and organisations and establish long-term business relationships that support small scale producers

02. Invest in sustainable agricultural technology and intensify
- collaboration with academic as well as scientific institutions

03. Demonstrate support to genetic diversity of seeds, plants and animals and report on Company's contribution to biodiversity

04. Foster knowledge and data sharing among businesses, contribute to global data platforms collecting
- agricultural information and share the same with all factors along the agricultural value chain

05. Uphold highest standards of sustainability in sourcing practices, enhance traceability of commodities and demonstrate transparency in agricultural supply chain.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Rallis

CASE STUDY 6

Improving Livelihoods of Small and Marginal Farmers

Rallis India's project focused on improving livelihood of small and marginal farmers by increasing productivity via modern and improved techniques of farming such as System of Rice Intensification (SRI). As a part of an integrated approach, it also ran an integrated watershed project and also focused on enhancing the lives of women and youth.

What did Rallis do?

- As a part of the initiative, modern and improved techniques of farming including, various government schemes were shared by experts in the community
- Initially, Rallis introduced SRI technique for paddy cultivation in lands offered by farmers. Post-implementation, crop production increased by 25 per cent and labour and seed cost declined by 50 per cent as compared to the normal method
- In FY2016-17, more farmers adopted the SRI techniques for paddy from five different villages. Farmers were also encouraged to opt for a second crop of vegetable and pulses
- In tribal areas, kitchen gardens were implemented in every household. A total of 190 households benefitted through kitchen garden projects.

Key success factors: What worked?

- Actual demonstration done on the field through pilot projects
- Villagers were convinced through counselling, discussion and meetings that the success of the initiative depended on unified efforts and community support.

Project impact

- Linkage with the agriculture departments helped create sustained support from Government schemes
- Increased soil productivity enabled farmers to cultivate a second crop
- A rise in crop production by 10-25 per cent was seen
- Labor costs and seed costs reduced by 50 per cent
- Due to the kitchen garden initiative, tribals could access nutritious food. This created a positive impact in the community. During the monsoon season the percentage of illness was reduced by 50 per cent thereby improving the overall health of families in the community.

Challenges

- The major barriers faced during the project was in mobilising farmers and procuring land for the pilot projects
- SRI practices were not adopted at large scale due to lack of awareness about practices, non-availability of labor, reluctance to maintain proper spacing between plants and transplantation of short duration nursery

GOAL# 2 IMPACTS

- Increase in yield
- Technical know-how
- Increased income

VALUE LEVERS FOR THE COMPANY

- Brand enhancement
- Social licence to operate



- Motivating tribals to opt for the kitchen garden initiative and underlining the health benefits of various vegetables consumed from the kitchen garden by the family was time intensive.

Tata Steel

CASE STUDY 7

Mission 2020 for Agriculture Development

Tata Steel has been working through the Tata Steel Rural Development Society (TSRDS), an NGO formed in 1979 to implement social development programmes for rural communities in and around Tata Steel’s operational areas. One of their CSR programmes – the Mission 2020 for Agriculture Development–looks to address poverty and food security by tripling agricultural income of marginal farmers in areas of high poverty.

What did Tata Steel do?

Rural poverty is most acute in the tribal belts of central India. TSRDS therefore, concentrated its agriculture programmes in those last mile areas.

In the eastern state of Odisha, the programme has been operational in Sukinda and Bamnipal areas of Jajpur district; and Harichandanpur, Ghasipura and Joda areas of Keonjhar district. The programme is run in partnership with the ‘Collectives for Integrated Livelihood Initiatives’ – an NGO formed by the Tata Trusts - that specialises in agriculture development. The programme aims to transform the agricultural incomes

of 7,000 households in these areas by 2020, by adopting a variety of strategies:

- Harnessing available skills and resources of tribal farming communities and by enhancing their capacities via skills-based training
- Improving the productivity of land by enhanced irrigation facilities, wasteland development, and horticulture
- Introducing dryland farming techniques in partnership with the Hyderabad-based International Crop Research Institute for the semi-arid tropics
- Developing wastelands and converting them into orchards and plantations

- GOAL# 2 IMPACTS
- Income
 - Technical know-how

- VALUE LEVERS FOR THE COMPANY
- Social licence to operate

- Creating and developing community institutions among farmers (men and women) so that the gains from the programme are sustained. These collectives also enable backward and forward linkages and bargaining power.



Project impact

- Irrigation: About 103 acres of land dependent on monsoon for agriculture has been converted into a three-crop land. This has been done through the establishment of irrigation arrangements, including community-managed lift irrigation systems. Besides, ponds have been created or renovated to benefit 344 farmer households. By 2020, the project will bring 3,000 acres under the triple crop system, thereby increasing income sustainability
- Plantations: About 60 acres of waste land have been brought under cashew, mango and lemon plantations in partnership with the National Horticulture Mission benefiting 195 farmers through 6,500 plants
- Backyard plantations benefitted 445 farmers through a coverage of more than 2,200 plants
- About 500 farmers have benefited from vegetable cultivation on 60 acres of land.

Key success factors: What worked?

- Formation of new self-help groups (SHGs) and rejuvenation of dormant SHGs prior to the start of agriculture interventions was critical. Additionally, the strategy to promote agriculture through women self-help groups was a key contributor to the success of initiative
- People in rural areas were ready to try and adopt new technologies in agriculture and actively participated in capacity building workshops
- Women members worked as a team for a common goal in every agricultural intervention run by Tata Steel.

Challenges

- Lack of irrigation facilities has been the biggest challenge for farmers. Moreover, due to large swathes of land under forest, the creation of irrigation structure was difficult
- Convincing villagers to participate in the agricultural intervention took considerable time. Also, marketing linkages needed to be strengthened to channelise high yield.

GOAL #3



GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

Ensuring healthy lives and promoting the well-being for all at all ages is essential to sustainable development. Efforts are needed to fully eradicate a wide range of diseases and address many persistent and emerging health issues.

TARGETS under Goal #3

01. By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

02. By 2030, end preventable deaths of newborns and under-five children

03. By 2030, end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases

04. By 2030, reduce by one-third premature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and well-being

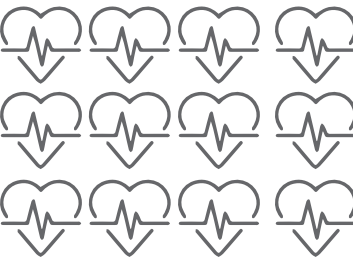
05. Strengthen prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol

06. By 2020, halve global deaths and injuries from road traffic accidents

07. By 2030, ensure universal access to sexual and reproductive health care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs

08. Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all

Ageing Population
80%



World's aging population (over 60) will live in developed countries by 2050

09. By 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination
10. Strengthen implementation of the Framework Convention on Tobacco Control in all countries as appropriate
11. Support research and development of vaccines and medicines for the communicable and

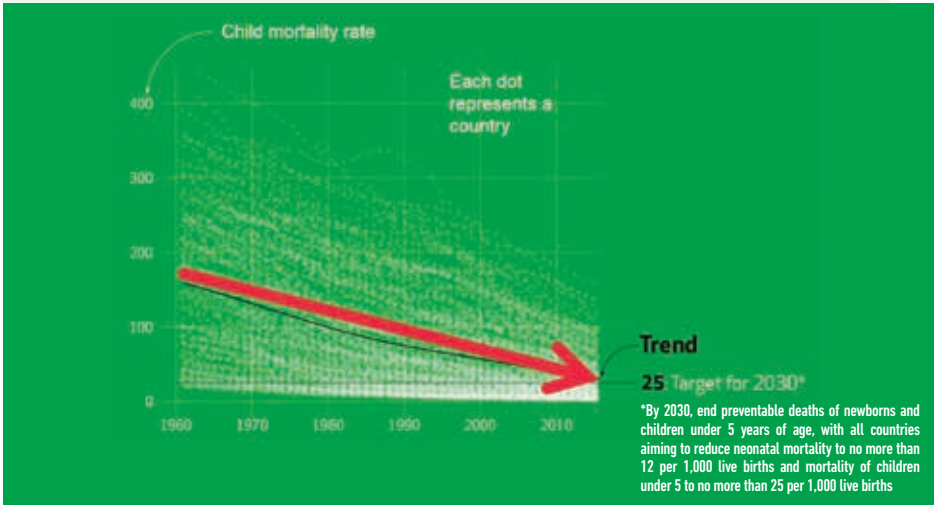
non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration which affirms the right of developing countries to use to the full the provisions in the TRIPS agreement regarding flexibilities to protect public health and, in particular, provide access to medicines for all

12. Increase substantially health financing and the recruitment, development and training and retention of the health workforce in developing countries, especially in LDCs and SIDs
13. Strengthen the capacity of all countries, particularly developing countries, for early warning, risk reduction, and management of national and global health risks.

WHY Goal #3 matters?

01. Growing youth bulge
89 per cent of 1.8 bn youth aged 10 to 24 live in developing economies today
02. Aging population
80 per cent of the world's aging population (over 60) will live in developed countries by 2050
03. Child mortality
43 deaths per 1,000 births
04. Maternal health
210 deaths per 100,000 births.

How will we get the under-5 child mortality rate down to 25 per live births by 2030?



Sources: Mortality rate (World Bank) <http://data.worldbank.org/indicator/SH.DYN.MORT>

BUSINESS & Goal #3: What's the Connect?

Certain groups lack access to adequate healthcare needs. These include women, undernourished children and adults in need of proper medication.

Businesses have a responsibility to respect all human rights, including the right to health of these groups.

Form partnerships to develop healthcare solutions that work for people, families, communities and nations.

Leverage new opportunities to support the delivery of health needs around the world through products, services and business activities, including value chains, distribution networks and communication activities.

BUSINESS & Goal #3: What's the Connect?

A business can influence several other dimensions of healthcare such as:

Occupational health & safety	Employee benefits	Delivery of products & services	Gender equality	Water & sanitation	Climate change	Peace & stability	Livelihood generation
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Business' role in healthcare and well-being should also address the need for safe working conditions and access to health services.

OPPORTUNITY for Business

There is an enormous value creation potential by providing quality, affordable and easily accessible healthcare.

\$34 bn

Projected global telemedicine market by the end of 2020

\$87.7 bn

Base-of-the-pyramid healthcare opportunity

8.9 bn

Potential access to skilled professionals across 107 countries

Businesses may need to invest in state-of-the-art infrastructure, identify the right partners and develop innovative operating models to realise this value.

How can business CONTRIBUTE to Goal #3?*

01. Align human resources policies with health related principles of human rights, including policies for HIV/ AIDS. Use already existing resources from WHO, ILO etc. for guidance

02. Partner with healthcare NGOs and public clinics to raise awareness and increase access to targeted health services for workers and their families

03. Make investments in health a priority in business operations
04. Facilitate and invest in affordable medicine and healthcare for low-income populations

05. Leverage corporate resources to support healthcare delivery by public and international organisations.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Steel

CASE STUDY 8

Project RISHTA- A Bond Towards Healthier Youth

Tata Steel initiated the Adolescent Health project, RISHTA, in Rajnagar, Madhya Pradesh, India. This initiative focused on improving the well-being of adolescents and enabled them in making informed decisions and choices about their sexual and reproductive health.

What did Tata Steel do?

- As a part of the initiative, Youth Resource Centers (YRCs) were set up to engage young people and communities on health and reproductive issues. Training sessions were undertaken on reproductive health issues
- Provided leadership and vocational training opportunities to young people in the programme area. The first two phases of this project covered 661 villages and 34 semi-urban slums and reached out to more than 40,000 adolescents
- Positioned RISHTA as a replicable example for other Tata group companies as well as the corporate world. Motivated peers to invest in sexual and reproductive health of youth as part of their CSR programmes.

Challenges

Reaching out to youth in rural areas for a sensitive subject like reproductive and sexual health.

Project impact

- The first two phases of the project covered 661 villages and 34 semi-urban slums from seven blocks of East Singhbhum and 305 villages from six blocks of Seraikela-Kharsawan respectively
- The project aims to cover 239 villages in Rajnagar
- The project reached out to more than 40,000 adolescents.



GOAL# 3 IMPACTS

- Quality of life (Health and Education)

VALUE LEVERS FOR THE COMPANY

- Building the brand

Key success factors: What worked?

Engaging the youth through the Youth Resource Centers by conducting behaviour change communication campaigns using engaging methods like street theatre, puppet shows, dance etc.

CASE STUDY 9

Combating Malnutrition

High prevalence of Severe Acute Malnutrition (SAM) among children under five in the rural and urban areas posed serious threat of rising infant mortality. UNICEF conducted successful experiments in the project area of Jamshedpur. For effective mitigation of the condition, the experiments suggested, it is necessary to treat the SAM children at hospitals like the Malnutrition Treatment Centre.

What did Tata Motors do?

Tata Motors established a 16 bedded Malnutrition Treatment Centre (MTC) at its Jamshedpur location in collaboration with UNICEF and the National Rural Health Mission (NRHM). Dedicated manpower, including doctor, paramedical, house-keeping and administrative staff were made available for the MTC round-the-clock. Catchments at the Anganwadi Centres were sensitised for referral of SAM children to the MTC. The treatment, discharge and follow-up treatment were institutionalised. SAM children were discharged post treatment after a weight gain by at least 15 per cent, followed by four follow-up visits. The mothers were given daily wage compensation through the MTC.

During the inception, training of Government doctors and paramedical staff from all over Jharkhand was organised at Tata Motors' premise by UNICEF, NRHM. Subsequently, Tata Motors established 89 MTCs spread across various districts of the state. The MTC of Tata Motors is the only unique facility run on a Public Private Partnership (PPP) mode by any corporate.

Project impact

1,100 SAM children have been successfully treated so far. The accompanying mothers/primary care givers have been trained on proper child care. The MTC brought down infant mortality in the district of East Singhbhum over the years.

Challenges

Inadequate mechanism available for community-based management of SAM at the grass root level. After completion of the treatment at the MTC, mothers stand vulnerable to old practices leading to their children slipping back into malnutrition post discharge.



GOAL# 3 IMPACTS

- Reduced Infant Mortality Rate (IMR)
- Treatment of SAM children
- Stretched targets
- Wider community reach
- Preventive measures

VALUE LEVERS FOR THE COMPANY

- Improved health
- Increased trusteeship
- Enhanced brand image

Key success factors: What worked?

The infrastructure and human resources available contributed to the success of the initiative. There was a strong will and support from the top management at the Company to focus on malnutrition as an issue. The quality of personalised care and the infrastructural facility surpassed other facilities. The availability of referral and emergency handling facilities at Tata Motors Hospital and Government Hospital helped a lot. Collaborations with UNICEF and NRHM as knowledge partners synergised the efficiency of operation and delivery of quality services.

CASE STUDY 10

Reducing Infant Mortality through the Maternal and New-born Survival Initiative (MANSI)

Infant mortality rate is relatively high in the state of Jharkhand. Tata Steel and its partners identified Seraikela block of Seraikela-Kharsawan district, with inadequate institutional health services for the intervention. There was also low awareness about healthcare practices among the community and villages spread across the area, resulting in difficulties in providing healthcare services.

What did Tata Steel do?

Since 2009, MANSI, a public-private initiative, has been implemented by Tata Steel in partnership with American India Foundation and the Department of Health and Family Welfare, Government of Jharkhand. The Society for Education, Action and Research in Community Health (SEARCH), Gadchiroli, Maharashtra, provided technical guidance for the project.

The operational area identified by Tata Steel, i.e. Seraikela block of Seraikela Kharsawan district, in Jharkhand, has been characterised by inadequate public health services; ignorance among the community and scattered villages in hilly terrains. All these have led to poor accessibility of health services and health practices, resulting in high maternal and infant mortality in the community. Capacity building of communities on maternal and infant health practices has been the key strategy deployed for the MANSI project.

The main objective of the MANSI project was to attempt a reduction in neonatal and infant mortality rates in all the 167 villages of Seraikela block in Seraikela-Kharsawan district by enhancing capacity of the existing Government volunteers at the village level and through demonstration of a sustainable model for scale-up.

Project impact

- Reduction in neonatal mortality rate by 46 per cent
- Reduction in infant mortality (up to the age of one year) rate by 39 per cent.

Challenges

Majority of the Sahiyas, who are the frontline government health workers, under Government of India's National Rural Health Mission were either semi-literate or illiterate. Consequently, it was a challenge motivating them to work diligently and building their capacity for implementing the MANSI project.



GOAL# 3 IMPACTS

- Reducing infant mortality
- Capacity building of frontline health workers 'Sahiyaas'

VALUE LEVERS FOR THE COMPANY

- Demonstrating the efficacy of Public Private Partnership
- Social licence to operate

Key success factors: What worked?

- Sahiyas were trained on home-based newborn care to check newborn deaths
- Total Quality Management (TQM) approach was deployed to solve a social problem across an entire administrative block
- Various partners contributed distinct but critical competencies and resources to the project. Partners included Tata Steel, through Tata Steel Rural Development Society; American India Foundation (AIF); Department of Health and Family Welfare, Government of Jharkhand and SEARCH, Gadchiroli, Maharashtra.

CASE STUDY 11

Towards a Healthy Future

Tata International has been organising health camps around its leather and leather products manufacturing facilities in Dewas, Madhya Pradesh, India. The programmes are part of its health and hygiene initiatives. Under the aegis of its CSR programme, the company aims to contribute to the overall development of society. The programme is creating an ecosystem that helps communities to grow and sustain.

What did Tata International do?

- One of the Company’s key areas of focus was enhancing access to quality healthcare services in rural India
- The CSR team identified that the village communities around its facilities needed access to basic healthcare such as health checks, vaccinations and medicines
- The Company explored partnerships with local NGO’s and government health services. It began a programme to provide these essential services to the communities
- Today, Tata International organises regular wellness and vaccination camps, making better health a reality for a large number of villages.

Project impact

- Supporting women’s health and wellness
- Women from marginalised communities were exposed to diseases due to low social and economic status accompanied by lack of awareness. Tata International undertook the unique initiative to organise the first-ever mega haemoglobin check-up and Rubella vaccination camp for girl students in FY2015-16
 - The Company kicked off the second phase of its Rubella vaccination camp under the Government of India’s ‘Beti Bachao Beti Padhao’ (protect the girl child, teach the girl child) programme
 - Care was taken to include differently-abled children under the ambit of the project. Health camps for visually impaired girl students under the MP Drishtiheen Kalyan Sangh mission was also organised.

GOAL# 3 IMPACTS

- Reduce the maternal mortality ratio
- End preventable deaths of newborns and under-five children
- Reduce pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment

VALUE LEVERS FOR THE COMPANY

- Improved quality of life through better health and hygiene



- Over 1,500 girls and women have benefitted from these camps, with over 3,000 Rubella vaccinations administered.

Building a healthy future for young buds

- Tata International launched the ‘Swasth Bachhe Swasth Bhavishya’ (healthy children, healthy future) programme in association with ESI health services, a Government of Madhya Pradesh agency, in FY2015-16
- The Dewas unit identified schools from four villages – Amona village, Binjana village, Rajiv Nagar and Sanjay Nagar – near its leather facility
- A series of health camps were organised in government schools (primary/middle schools) to educate children on basic health as well as monitor their health through health cards
- About 11 camps have been held, at which the services of child specialists, gynaecologists and nursing staff were made available. Children were given medicines, vaccinations for Rubella, dental check-ups, and general health checks, including preliminary checks for height and weight. Close to 1,000 children benefitted from these camps.

Key success factors: What worked?

- Involvement of enthusiastic volunteers
- Leveraging existing schemes of the Government of India.

Challenges

Low awareness about healthcare and hygiene practices in the community.



GOAL #4



QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Obtaining a quality education is the foundation to improving people’s lives and sustainable development. Basic literacy skills have improved tremendously, yet bolder efforts are needed to make greater strides for achieving universal education goals.

promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of cultures’ contribution to sustainable development

- 08. Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 09. By 2020, substantially expand globally the number of scholarships for developing countries in particular least developed countries, small island developing states and African countries for enrolment in higher education, including vocational

training, and communications technology, technical, engineering and scientific programs in developed countries and other developing countries

10. By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states.

GOAL #4

WHY Goal #4 matters?

- 01. Access to education
57 million children of primary school age do not attend school
- 02. Financing gap
\$38 billion financing gap for basic and lower education in Asia, Africa and Latin America
- 03. Skill gap
63 per cent CEOs are concerned about availability of key skills

Enrolment in primary education in developing countries has reached 91 per cent but 57 million children remain out of school



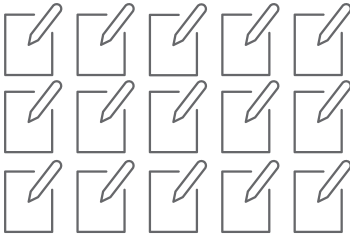
Source: <http://www.globalgoals.org/global-goals/quality-education/>

103 million youth worldwide lack basic literacy skills, and more than 60 per cent of them are women

TARGETS under Goal #4

- 01. By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 02. By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 03. By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university
- 04. By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 05. By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples, and children in vulnerable situations
- 06. By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 07. By 2030, ensure all learners acquire knowledge and skills needed to

Access to Education
57 mn



Primary school children who do not attend school

BUSINESS & Goal #4: What’s the connect?

Education is a fundamental human right and is indispensable for the achievement of sustainable development. Participation by all stakeholders including, the private sector is needed to advance on this goal.

Businesses should ensure that they commit to furthering this fundamental human right without any discrimination.

Apply best practices to engage responsibly in supporting higher education and public sector’s ability to provide inclusive and equitable quality learning.

Develop the capacity of future employees and building a more diverse employee pipeline to address the skill gap.

BUSINESS & Goal #4: What's the Connect?

Beyond education, businesses can influence several other dimensions of sustainable development such as:

Empower girls	Combat climate change	End extreme poverty	Develop lifelong skills	Create job opportunities	End discrimination
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Business' role in advancing the education goal should be aligned to collaborate within local education systems and in communities to determine the best utilisation of resources.

OPPORTUNITY for Business

There is an enormous value creation potential by providing quality, affordable and easily accessible education.

\$7bn

global financing gap to meet financial literacy needs

30%

CEOs feel that talent constrains them from pursuing market opportunities

Businesses can build human capital through sustained sourcing of an educated workforce and enhancing brand image through education initiatives.

\$70bn

the market size of mobile education by 2020

How can business CONTRIBUTE to Goal #4?*

01. Establish relationships with Government entities and higher education institutions to improve education curricula to better align with business needs including, responsible management

02. Create programmes (e.g., internships, work-study programs, traineeships, etc.) that give students earlier access to the corporate environment
03. Provide employees with continuous opportunities to improve their (job) skills for their current and future employment

04. Develop cost-effective education products and services that eliminate barriers to access and improve the quality of learning (e.g., ICT solutions to improve the delivery of education, innovative measurement tools, etc.)
05. Ensure learning environments are clean and safe for children by mitigating business-related environmental hazards, like pollution and limited water access.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Rallis

CASE STUDY 12

RUBY (Rallis Ujjwal Bhavishya Yojana)

Rallis' educational intervention programme known as RUBY focused on quality education for schools from socially excluded communities in select villages across Maharashtra and Gujarat. Along with quality education, it also emphasised on strengthening the infrastructure facilities and technology. This will enable both students and teachers leverage quality education to achieve the desired outcomes.

What did Rallis do?

- Rallis' RUBY programmes focused on improving learning outcomes and imparted soft skills necessary for students' self-sustainability. A majority of the students were introduced to the programme for the first time and a considerable percentage of students were first-generation learners
- Under the RUBY programme, students were provided lessons on Science, English, soft-skills, career orientation, e-learning and basic computer training
- 'Train the trainer' for English interventions - which included school teachers and community representatives especially for women
- Rallis hired subject matter experts who imparted various trainings and provided exposure to students. For e.g. To make the Science syllabus more interesting and meaningful, experts helped students learn by conducting experiments. Each student conducted 100 experiments, each year
- Rallis supported schools through infrastructure development, such as building Science and IT Labs, providing compound walls for safety, setting up sanitation facilities, and digital classrooms. Additionally, the Company created water harvesting structures, play equipment, e-learning facilities along with

software, and set up a library & provided books, among others. Rallis also developed a Model Tribal School at Atali, Gujarat near its Dahej manufacturing location.

Project impact

Rallis was involved with 28 schools and more than 8,700 students (with 40 per cent students from Affirmative Action population) from Gujarat and Maharashtra. RUBY helped in making students better understand subjects taught at school, improved exam performance of students and also increased the student's attendance and overall admissions.

Challenges

- Developing mutual trust with school Principals and teachers and convincing them of the project's benefits in lieu of monetary donations
- Aligning Rallis supported interventions with curriculum
- Monitoring project progress/ impact.

GOAL# 4 IMPACTS

- Quality education

VALUE LEVERS FOR THE COMPANY

- Brand differentiation



Key success factors: What worked?

- All stakeholders were engaged through a participatory approach and interventions were designed as per the need assessment
- An integrated approach was developed to address a wide range of needs, targeting specific aspects such as infrastructure support, skills development, digitalisation of classes, science and english training initiatives
- Continued partnership and regular interaction with school authorities, students and experts.

CASE STUDY 13

Together towards a Digitally Inclusive Future

In a world growing dependent on advanced communications technology to stay connected, those without access or exposure, tend to get left behind. With the hope of changing this reality, Tata Communications and Parikrma Humanity Foundation in Bengaluru joined hands to provide quality education to underserved children. They picked up a blended learning approach and an innovative pedagogy centred on creating global citizens.

What did Tata Communications do?

Tata Communications has always strived to be a leader in the telecommunications industry, innovating and perfecting its technologies every day. In today’s day and age, where information is king, the quality and quantity of information available at one’s finger tips, is immense, if one has access to it.

Today in Bengaluru, while the privileged have access to the best smartphones connecting them to the world at 20 mbps, those from the other side of the coin, may consider themselves lucky if they have even seen a laptop up close.

To bridge this abhorrent gap in all aspects of life, and provide a complete education and wholesome nutrition, among underprivileged children, Parikrma Humanity Foundation was founded in 2004. Currently, it operates four schools in Bengaluru, called the Parikrma Centres for Learning, providing the best possible education, free of cost to children from over 70 slums and four orphanages.

Tata Communications and Parikrma partnered to initiate the “Integrated Development Programme for Children through Sports, Educational Interventions and Internet Connectivity Support”, thus reaching out to 1,700 children across four Parikrma schools.

Project impact

1,700 children and more than 36 teachers across the four schools were provided access to the internet and taught the best ways to leverage technology for global exposure. They were provided wider improved sports infrastructure and high calibre coaching to maximise their potential. Qualitatively these efforts ensured that the students had better opportunities to dream big and were equipped to make those dreams a reality.

GOAL# 4 IMPACTS

- Education as a means to achieve sustainable development
- Enhance access to quality education to underserved children
- Promote 21st century skills using blended learning
- Create global citizens

VALUE LEVERS FOR THE COMPANY

- Address fundamental concerns of society
- Utilise business competence in ICT to create a connected society
- Next practices in education



Key success factors: What worked?

Partnership with Tata Communications lent Parikrma and its students an assurance of continuity owing to a long-term commitment. Tata Communications’ partnerships have a minimum duration of three years, which is also a good gestation period for visible change. Additionally, Tata Communications connected the four schools through a high speed internet with the objective to promote blended learning for quality education.

Challenges

Online exchanges within the four branches of Parikrma ensured that the teacher absenteeism was addressed to a large extent. Virtual competitions were held to inculcate a sense of healthy competition. Also, it facilitated in getting geographies closer not just across the four schools but, globally as well.

Integrating an internet infrastructure into an already fully functioning ecosystem as Parikrma, was the biggest hurdle. The teachers had to be trained on how to impart age-appropriate digital literacy.



CASE STUDY 14

'Inspiring Tomorrow's Engineers': Tackling the Global STEM Skills Crisis

Jaguar Land Rover's 'Inspiring Tomorrow's Engineers' programme promotes learning and engagement in STEM (science, technology, engineering and maths) subjects. The programme, in collaboration with schools and colleges, inspires young people to consider engineering and manufacturing careers. It's critical that talented young people are encouraged to become the next generation of engineers and technologists to address the skills shortage. This will enable organisations to sustain business needs over the long-term.

GOAL# 4 IMPACTS

- Promoting STEM engagement
- Supporting social mobility
- Engaging future talent

VALUE LEVERS FOR THE COMPANY

- Engaged passionate people
- Global growth
- More great products faster



What did JLR do?

The shortage of newly-qualified engineers globally has been major issue for the automotive industry. In 1998, Jaguar Land Rover launched its 'Inspiring Tomorrow's Engineers' school STEM education programme that promoted engineering/manufacturing careers to young people across the UK. The programme included education

centres, classroom activities and tours to reinforce learning in a real-world environment. Further, the programme encouraged students through STEM challenge, built and raced vehicles, emulating genuine engineering processes. Key elements are now being rolled out to schools globally.



Project impact

- 2.9 million young people engaged to date
- STEM challenges engaged 165,000 students outside the UK last year
- 200 unemployed youngsters in UK/Brazil participated in JLR employability programme, many now have jobs at JLR/auto industry
- 50 young people who participated in ITE, including 30 women, have joined JLR since 2014.



Key success factors: What worked?

- STEM challenges have gone from strength to strength in UK and are now available in 15 global countries, including Australia and South Korea
- Use of cloud to share online STEM challenge programme with all global schools increased global engagement
- Leveraging education centres to support additional programmes to unemployed youth and former military personnel to help them prepare for job opportunities
- Well-established delivery partners with global expertise and insights.



Challenges

- Engaging experienced local delivery partners who share the same vision and values as JLR
- Ensuring education offer is tailored to local needs
- Securing investment for new facilities e.g. JLR's new Education Centre in Brazil
- Effective measurement.



CASE STUDY 15

Providing a Chance to Chase Dreams

This project entailed supporting bright and deserving students of Jawahar Navodaya Vidyalayas (JNVs) to pursue their dreams of receiving an education from - one of India’s most prestigious universities - the Indian Institute of Technology (IITs). Free IIT-Joint Entrance Examination (JEE) coaching was provided to students at JNV Puducherry and JNV Mangalore in partnership with the NGO ‘Avanti Fellows’. The coaching adopted low-cost, innovative and advanced pedagogy involving peer-to-peer learning.

What did Tata Motors do?

- Tata Motors, under its CSR programme funded Avanti Coaching Centers at JNV Puducherry and JNV Mangalore which also included providing extensive coaching to students in Std. XI and Std. XII for two years
- To recognise and appreciate meritorious students who qualified for the IIT-JEE Mains and Advanced exams, the top-performers were gifted laptops, tablets for their further undergraduate studies at IIT/NIT.

Project impact

- The percentage of students who qualified for the IIT-JEE Advanced Exams at JNV Puducherry was 65 per cent (15 out of 23) in year 2016 and 50 per cent (12 out of 24) in year 2015
- Eight students were admitted into IIT. Another 13 students secured admissions into NIT and eight students secured admissions in other top 10 engineering colleges.

Challenges

- Real-time synchronisation of Avanti classes with regular JNV school classes was a challenge given the vast syllabus and time constraints
- Sustaining teaching staff and the availability of professional student counsellors at remote locations such as Puducherry has been an ongoing challenge.

Key success factors: What worked?

- Unlike the conventional ‘rote learning’ method, students underwent peer learning / consultative methodology training
- Exposure to role models (mentors) who were alumni from IITs/NITs.



GOAL# 4 IMPACTS

- Bright students realised their dreams of pursuing IIT education
- Increased in aspirations of students for better career prospects and enhanced quality of life for their families

VALUE LEVERS FOR THE COMPANY

- Being an engineering company, Tata Motors was proud to support engineering education for deserving students at national institutes of excellence such as IIT/NIT
- Brand and reputation

CASE STUDY 16

Impact through Empowerment

TCS North America (NA) recognises that the company and the nation’s future depends upon growing the STEM - Science, Technology, Engineering and Maths - skillset of school children. Through cross-sector efforts along with partners, TCS NA works to inspire students. Students from ethnic minorities, marginalised groups and low income families, and women are encouraged towards STEM education and careers.

What did TCS do?

- As a leading global IT services and business solutions provider, TCS recognises that its future and that of the nation depends on more graduates with STEM-based skills entering the workforce each year. Towards this goal, TCS collaborated with a number of organisations to support STEM 2.0, a national initiative focused on making students acquire digital fluency—mastery of the problem-solving skills they would need to become successful STEM professionals in tomorrow’s economy
- TCS has been a founding member of ‘Million Women Mentors’, an organisation whose aim is to match a million corporate mentors with girls/ young women in STEM fields
- TCS has led the development of the mentoring platform of US2020, a national initiative developed by a White House directive to generate innovative solutions to STEM education challenges. In support of this goal, TCS partnered with Chevron to support the 2015 and 2016 US2020 STEM Mentoring Awards at The White House
- TCS empowered its workforce of IT professionals through its flagship STEM education curriculum, goIT, which includes career awareness workshops, hands-on technology education, and teacher/partner training.

Project impact

- Since inception, goIT engaged more than 12,000 North American students across 32 cities and over 100 school districts with promising results.
- Since fiscal year 2014, TCS’ pro-bono technology services resulted in the equivalent of more than \$10 million dollars of social good to STEM non-profit partners and their beneficiaries across America
 - TCS and MWM secured over a million mentor pledges (both women and men), with 650,000 mentoring relationships underway against the pledge.

Key success factors: What worked?

- TCS’ expanded network of partners helped the company broaden the reach of its goIT programme from nine cities in 2009 to 32 cities in 2016
- TCS’ outreach to support STEM mentorships of women helped accelerate ‘Million Women Mentor’s’ target deadline of engaging one million women
- By making use of its workforce’s core competencies, TCS engaged nearly 2,000 employee volunteers in STEM-focused programming, providing over 84,500 skill-building hours to nearly 18,000 students in the US and Canada.

GOAL# 4 IMPACTS

- TCS convened four annual CS Education National Roundtables with STEM connector®, engaging over 300 thought leaders across industry, government, education and non-profit sectors
- TCS released five white papers on STEM Imperative, CS Education and Women in STEM providing foresights, frameworks, roadmaps and leading a national call to action
- Empowered TCS’ workforce to utilise its core competencies in inspiring youth in STEM careers

VALUE LEVERS FOR THE COMPANY

- Building strong partnerships
- Empowering students
- Engaging employees’ core competencies

Challenges

By 2020, there will be 1.4 million jobs in computer science, yet university enrollment in IT-related fields decreased by more than 60 per cent over the last decade in the United States. To address this trend, TCS created goIT to increase STEM education and career awareness.

Tata Steel

CASE STUDY 17

Supporting Children and Youth Development in Remote Areas of Thailand

Children and youth are important stakeholders in the development and stability of the nation in the future. Thus, it's important that they receive adequate and continuous opportunities to develop their knowledge and skills. The Company initiated "Grow Smart with Tata Steel" project to encourage learning and self-development for school children in remote areas of Thailand. The programme promotes reading habits in children, that expands their knowledge, skills and ability to apply lessons learnt, to assist their families and communities.

 What did Tata Steel do?

The Company created book corners in school libraries and supplied books and other learning materials. The initiative was first started at schools in the Company's surrounding communities and later expanded to schools in rural areas throughout Thailand. The overall target for creating book corners is 400 schools.

 Project impact

Book corners were setup across 240 schools in 50 provinces (as of 2016), including five mobile libraries nationwide. Further, stakeholders of the company i.e. shareholders, customers, partners and employees cooperated in donating more than 3,000 pairs of socks to the students of the schools under "Grow Smart with Tata Steel" project.



GOAL# 4 IMPACTS

- Enhance the quality of education in Thailand
- Help reduce inequality of children's education in the remote area by enabling them access to quality education materials

VALUE LEVERS FOR THE COMPANY

- Increase brand reputation in the rural areas
- Social license to operate
- Create relationship with the community and local government

 Key success factors: What worked?

- Using an expertise in supporting schools nearby steel plants for several years, Tata Steel Thailand (TSTH) selected and modified education methods as provision of books and, tables that would enable better learning outcomes for children
- TSTH tracked the academic records and number of the library users on a monthly basis.

 Challenges

The main challenge of this project was in the tracking process since all of the selected schools were in the remote areas. It was difficult for TSTH to visit all schools to monitor and evaluate the book corners' condition and maintenance.



GOAL #5



GENDER
EQUALITY

Achieve gender equality and
empower all women and girls

Gender equality is a foundation for a prosperous world. Providing women and girls with equal access to education, health care, decent work, and representation in political and economic spheres will fuel sustainable economies.

- outcome documents of their review conferences

07. Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms
- of property, financial services, inheritance, and natural resources in accordance with national laws

08. Enhance the use of enabling technologies, in particular ICT, to promote women's empowerment
- 09.** Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

GOAL #5

WHY Goal #5 matters?

- 01. Gender divide**
Around 42 to 48 per cent participation rates for women in universities in India and China
- Women could increase their income globally by up to 76 per cent if the employment participation gap and the wage gap between women and men were closed
- 02. Need to protect women**
Women are likely to spend 4.5 more years in retirement than men
- 03. Women lack representation**
4.8 per cent CEOs of Global Fortune 500 companies are women.

By 2030, how do we ensure that women have equal chances to succeed at all levels of public life?



Women could increase their income globally by up to 76 per cent if the employment participation gap and the wage gap between women and men were closed.

TARGETS under Goal #5

- 01.** End all forms of discrimination against all women and girls everywhere

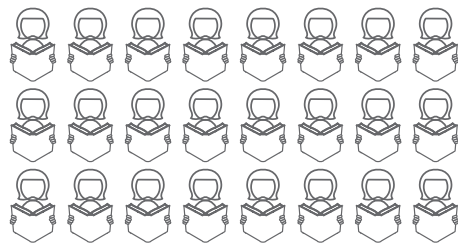
02. Eliminate all forms of violence against all women and girls in public and private spheres, including trafficking and sexual and other types of exploitation

03. Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilations

04. Recognise and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of
- shared responsibility within the household and the family as nationally appropriate

05. Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

06. Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Program of Action of the ICPD (International Conference on Population and Development Programme) and the Beijing Platform for Action and the



Participation rates for women in universities in India and China.

BUSINESS & Goal #5: What's the connect?

Increasing need to drive gender participation and contribution in education and workforce

- Investing in women's empowerment produces the double dividend of benefiting women and children, and is pivotal to the health and social development of families.
- Business needs to leverage ICT innovation for the advancement of women's and girls' empowerment.
- Private sector leaders are increasingly implementing cutting-edge initiatives, to advance women's empowerment within their workplaces, marketplaces and communities.

BUSINESS & Goal #5: What's the Connect?

Businesses can enable gender equality by focusing on the following issues:

Equal remuneration for women	Diversity and equal opportunity	Access to healthcare services	Workplace violence and harassment	Access to sanitation	Women in leadership	Childcare services and benefits	Personal freedom of expression
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Opportunities exist for businesses to align their strategies and operations with global priorities by mainstreaming gender equality into all areas of corporate sustainability and systematically and strategically scaling up actions which support the development and livelihoods of women and girls.

OPPORTUNITY for Business

Gender-diverse companies are likely to benefit through:

MARKET SHARE
45%
more likely to witness market share growth

EQUITY
70%
more likely to successfully capture new markets

MARKET SIZE
53%
likely to achieve higher returns on equity

Businesses may need to develop an enabling ecosystem for women and provide them with technology access and skill development.

How can business CONTRIBUTE to Goal #5?*

- 01.** Assure sufficient participation of women – 30 per cent or greater – in decision-making and governance at all levels and across all business areas

02. Pay equal remuneration, including benefits, for work of equal value and strive to pay a living wage to all women and men
- 03.** Support access to child and dependent care by providing services, resources and information to both women and men

04. Establish a zero-tolerance policy towards all forms of violence at work, including verbal/ and/ or physical abuse and prevent sexual harassment
- 05.** Expand business relationships with women-owned enterprises, including small businesses and women entrepreneurs.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Steel

CASE STUDY 18

Empowering Girls through Education

Tata Steel Rural Development Society's interventions in the field of education span the entire cycle of schooling—from elementary school to high school. The Camp School initiative began in FY2005-06, under the Jharkhand Education Project (JEP). Managed and run entirely by Tata Steel, the camp school intervention aims to mainstream girls who have dropped out from the formal education system, to reintegrate through a 11-month residential school education programme.

What did Tata Steel do?

Tata Steel has been running two Camp Schools – one at Pipla Centre, Jamshedpur Block in East Singhbhum district and the other at Noamundi in West Singhbhum district of Jharkhand.

Girls in the 9-14 years age-group, who were never enrolled in any school or were school drop-outs, were brought to the centre, where they underwent a nine month bridge course. At the Camp School, they are taken through an intensive learning process so that they completed the course up to class-5 and would be mainstreamed in to government schools. Also they were made aware of their right to education, right age of marriage, vocational skills and behavioral skills.

Aside from textbooks, students at Camp School were introduced to a host of interactive learning materials as well as extracurricular activities like public speaking, creative writing etc.

Project impact

In the last decade, more than 1,700 drop-out girls have been mainstreamed into formal education through the efforts of Tata Steel in Jamshedpur and Noamundi.

Key success factors: What worked?

- Bridging the literacy gaps of drop-out girls by enrolling them in residential educational programme
- Upgrading their educational standards leading to mainstreaming with formal schools
- Aim to improve quality of life by imparting vocational training, behavioral skills etc
- Atmosphere of home away from home
- Parental guidance by the teachers
- Constant monitoring, motivation and interaction by Senior Management of Tata Steel

Challenges

- Selecting and admitting girls who have dropped out for a long period of time (preference given to those who have dropped out for 4 – 5 years)
- Mainstreaming the passed out girls into the formal education system, especially in higher classes
- Operational area highly influenced by Left Wing Extremism leading to resistance of community to release girls to stay in camp school

GOAL# 5 IMPACTS

- Access to education for girls
- Linking to formal education after the bridge course

VALUE LEVERS FOR THE COMPANY

- Brand enhancement
- Social licence to operate



CASE STUDY 19

Empowering Women in India: Power of 49

The 'Power of 49' campaign was delivered through Tata Tea's iconic social awakening platform 'Jaago Re' and comprised the following phases:

- The first phase focused on creating an awareness among women about the 'Power of 49' and the power of their informed vote in the Indian general election in 2014
- The second phase encouraged women to voice the issues that were critical to them.

GOAL# 5 IMPACTS

- Build brand
- Reduce risk
- Grow revenue

VALUE LEVERS FOR THE COMPANY

- Reducing inequalities
- Gender diversity
- Quality of life



What did Tata Global Beverages do?

- Developed the world's first crowd-sourced political manifesto to highlight women's issues
- Launched 'The Power of 49', a multi-faceted campaign designed to help woman in India realise their power to change the country with a vote
- The campaign integrated empowerment stories into prime-time soap operas and secured 50 of Bollywood's biggest stars as active advocates
- Created the mobile 'Push the Pin' mechanism which encouraged women to flag issues whenever and wherever they occurred, prompting debate and conversation
- Summarised key issues, that were highlighted by women, in a 10-point document - 'Voice of 49' manifesto that was released the media and which unleashed a torrent of debate across every Indian newspaper and network.



Project impact

- 1.2 million women participated in creating the 'Voice of 49' manifesto
- Manifesto was integrated into the political manifestos of India's three biggest political parties
- 700,000 women flagged issues through 'Push the Pin'
- The campaign inspired the highest ever-female voter turnout in Indian history
- Tata Tea sales increased by 13.4 per cent
- Promoted gender equality and women's rights.



Challenges

- Changing existing attitudes and behavior of women in India, since research revealed that women believed that their vote made no difference
- Getting women to openly voice their views on public platforms.



Key success factors: What worked?

- User-friendly platforms (e.g. Push the Pin, missed call, SMS) for women to voice their opinions and views on issues that matter to them
- The campaign was launched ahead of the 2014 general election, which provided visibility and shined a light on the importance of informed voting
- Social media helped to expand the reach of the campaign to a large extent
- The endorsement of leading film and television celebrities encouraged women from across the country to raise their voice.



GOAL #6



CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

Water scarcity, poor water quality and inadequate sanitation negatively impact the livelihood and food security of poor families across the globe. Access to clean water is an essential element for the creation of a sustainable world.

WHY Goal #6 matters?

- 01. Limited access to clean water**
More than 780 million people do not have access to clean water
- 02. Impact on cleanliness**
No access to adequate sanitation to 2.5 billion people
- 03. Impact on health**
6-8 million people die from disasters and water related diseases.

Investing in water, sanitation and hygiene (WASH) for employees, brings benefits to business and the wider community.

Sources: <http://www.globalgoals.org/global-goals/clean-water-sanitation/>

TARGETS under Goal #6

- 01.** By 2030, achieve universal and equitable access to safe and affordable drinking water for all
- 02.** By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- 03.** By 2030, improve water quality by reducing pollution, eliminating dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- 04.** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity
- 05.** By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
- 06.** By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
- 07.** By 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programs, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- 08.** Support and strengthen the participation of local communities in improving water and sanitation management.

BUSINESS & Goal #6: What's the connect?

Competing demands for clean fresh water....

Households	Energy generation	Agriculture	Ecosystem	Industrial use
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Businesses can adopt values and practices that aim to safeguard long-term availability of clean water and the provision of sanitation for all stakeholders in a watershed.

Businesses can contribute to the alleviation of these water challenges by adopting a water stewardship strategy that addresses the economic, environment and social dimensions of water.

By adopting stewardship, companies are able to make a positive contribution to improved water and sanitation management, and governance that addresses their risks while contributing to sustainable development.

This means adopting values and practices that aim to safeguard long-term availability of clean water and the provision of sanitation for all stakeholders in a watershed.

OPPORTUNITY for Business

\$1
SPENT

on water and sanitation
generates \$4 in increased
economic activity

50%
INCREASE

in water withdrawal in
developing countries
by 2025

Businesses must focus on and invest in developing clean and efficient water & sanitation infrastructure by leveraging digital technologies and the knowledge of NGOs and Governments.

How can business CONTRIBUTE to Goal #6?*

01. Prioritise water efficiency across operations by installing best practice technologies for water conservation, in particular in water scarce areas

02. Educating employees about the importance of water efficiency, including tying performance bonuses or operations-based incentives to efficient practices

03. Mitigating against water pollution with state-of-the-art waste-water treatment processes for effluent discharge

04. Development of innovative manufacturing processes such that substances with high water
- contamination potential are eliminated and substituted with materials that are easier to remove

05. Collect and treat agricultural run-off and use as fresh water source

06. Invest in clean-up when necessary, restoring sites to pre-spill quality levels

07. Invest in water and sanitation projects or infrastructure in under-served regions

08. Invest in clean-ups and restoration of water ecosystems to ensure sustainable water withdrawals
09. Prohibit the use of chemicals and materials that can be particularly detrimental to water quality if improperly disposed

10. Invest in water treatment so that municipal treatment facilities are not overburdened by industrial waste-water

11. Ensure that all employees and their families have ample access to safe drinking water and adequate sanitation.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Motors

CASE STUDY 20

Clean Water & Sanitation

India ranks dismally on the 120th spot, out of 122 nations, for its water quality and 133rd out of 180 for water availability. It is estimated that only 18 per cent of the total population has access to treated water. Over 138 million rural households are water stressed resulting in 11,80,000 deaths annually due to contaminated water and diarrhea. Women and children are the worst hit. Indian women have always borne the brunt of water shortages. The deep seated patriarchy manifests itself in numerous ways; one such problem is where the responsibility of drawing/bringing water is on women, while the right over water is in hands of men. For women it means travelling long distances, compromising on health and leisure, while for young girls it means dropping out of schools and risking their future. Having access to clean drinking water all the time is therefore, central to human development.

What did Tata Motors do?

- Sumant Moolgaokar Development Foundation (SMDF) is a social arm of Tata Motors. It is mandated to provide sustainable drinking water alternatives to water stressed/ vulnerable habitations across the country. These initiatives are called 'Amrutdhara' which are linked to the national Drinking Water Programme

	Year	Total projects	Total Villages
Total	2010 till date	413	320

- Reached out and covered over 1 lakh persons (40 per cent of which belong to SC/ST community and 100 per cent economically disadvantage sections of society) across 320 villages in Dharwad, Jamshedpur, Lucknow, Pantnagar, Pune, Sanand and Thane.

Key success factors: What worked?

- These water solutions/alternatives are provided after doing need assessments and planning context specific solutions such as water storage tanks (reservoirs), wells, RO machines and hand pumps
- Villages partnered by donating land through 'gift deeds', locally available material for construction work and providing free labour (shramdaan)
- Wisdom of senior citizens in the village helped reach out to people for installation and propagate awareness about the efforts.

GOAL# 6 IMPACTS

- Savings of ₹ 3 lakh per year (as water tanker services have stopped)
- Effective entry points for CSR work
- Brand and reputation enhancement

VALUE LEVERS FOR THE COMPANY

- Improving the quality of life of the communities
- To become water-neutral and finally water positive (especially in green water)
- Water is an enabler for effective CSR programme which further helps in the SDG agenda

Project impact

- Availability of minimum 25 litres/ person per day to over 1 lakh people across 413 projects in 320 villages (as per WHO standards)
- This has resulted in arresting diseases that arise due to lack of safe drinking water
- The initiative significantly cut down the distance travelled by villagers, to procured water
- This has also resulted in higher enrolment of girls in the Primary schools.

Challenges

- Seasonal - It's difficult to make progress in civil work during the monsoons
- Accessibility - Hamlets are remote and having uneven terrain with little or no approach roads
- Vendors are generally unwilling to work in such locations.

CASE STUDY 21

Model Village Development

Rallis India Ltd. initiated the Model Tribal Village Development Project. The project focuses on building a sustainable eco-system where every individual will have access to basic amenities /infrastructure, livelihoods, government entitlements, economic development, capacity building, good health, education and other essential resources to improve their level of well-being and happiness.

What did Rallis do?

Rallis believes in a participatory and demand driven approach of social development. A baseline survey was carried out to understand the challenges faced and opportunities available for development of tribal villages. A group was formed with the help of villagers; a group that would act as an implementing agency to execute the various initiatives in the village as per survey findings and prioritisation.

Based on need assessment by a third party, prioritisation was done to implement key projects in three years’ time.

Rallis decided to install integrated power (solar+ wind) to electrify the village, implement watershed projects, desilt the existing check-dam to provide drinking water and water for irrigation, and built individual toilet and bathrooms for all

GOAL# 6 IMPACTS

- Ensure equal footing for socially disadvantage group
- Frugal innovation

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Community relations

households to make the village free from open defecation. As a part of the participatory approach and to encourage villagers to take ownership of initiative, it was decided to take 20 per cent contribution from villagers in terms of *Shramdaan* (Labor work).



Project impact

After the first year of intervention, villagers have access to clean drinking water, and can avail water, for 12 months, for household and agricultural use. Electricity is available in households and street lights have been set up. There has been a significant reduction in open defecation leading to improved health outcomes. The Government has initiated road-work and agreed to provide electricity to the village after seeing the success of Rallis Hybrid system. Existing hutments have also been replaced with *pukka house* in a phased manner.

Key success factors: What worked?

- The project interventions are based on a community needs assessment involving experts
- Stakeholders’ engagement through a participatory approach; ownership of the project was generated amongst the beneficiaries through ‘Shram Daan’ – providing service for community work and maintaining the infrastructure built in phase-1
- An integrated approach for development was achieved, one that addresses a wide range of community needs through several projects targeting specific aspects such as water, electricity, modernisation of agricultural practices, healthcare and hygiene, education and awareness building activities.

Challenges

- Developing mutual trust with villagers and convincing them of the project’s benefits
- Katkari tribes are forest tribes and it was a challenging task to convince and inspire them to participate and support their own development though this project
- Local politics and political interest
- Convincing villagers to take ownership of the projects.



CASE STUDY 22

Rain Water Harvesting Lakes

In order to achieve water sustainability, various efforts are made and implemented by TCS in its owned premises in India. The rain water harvesting structure is an important feature of building design. Rain water is harvested using roof top collection systems, recharging to bore wells, construction of recharge trenches, recharging pits, and water bodies. Apart from various methods and techniques for water harvesting, innovative water conservation projects and awareness drives have also been implemented. Lake creation is one such initiative. Water resources conservation is one of TCS' major commitments, stated in the TCS Environmental Policy. It is an important part of the Company objectives and targets covered under the implementation of an integrated health, safety and environment management system.



What did TCS do?

Rain water harvesting lakes have been constructed in the most water-stressed cities of India i.e. Chennai and Hyderabad

- The lake at Synergy Park, Hyderabad has been established in 2007 while Siruseri, Chennai was developed more recently, in 2010
- Aeration system has been installed in the lake to increase oxygen supply and decrease stratification in the lake
- The surrounding area of the lakes have been developed through plantations of fruit bearing as well as various ornamental trees in order to act as feeding, roosting sites for birds and small mammals.



Challenges

- Maintenance of water quality of the lake
- Control of weed infestation.



Project impact

- Positive micro-climate has been enhanced to the cooling effect of the lakes
- Catering to non-potable domestic water demand
- Water supply for irrigation
- Biodiversity conservation and enhancement
- Social benefits as surrounding water tables were replenished.

Key success factors:
What worked?

- Besides increasing the aesthetic value it has become a recreational site
- Increase in aquatic bird species: 43 species of birds were recorded in and around the surrounding area of the lake. Winter migratory birds (like Darter and Little Cormorant) also visit the Hyderabad Lake.

GOAL# 6 IMPACTS

- Rain water harvesting
- Ground water recharging

VALUE LEVERS FOR
THE COMPANY

- Building the brand
- Community relations

CASE STUDY 23

Towards Creating Swachh Bharat

To help India harness the true potential of its demographic dividend, TCS stepped forward to extend its support towards the 'Swachh Bharat' campaign, 2014. The schools identified for this programme were: those without any girls' toilets and those without separate girls' toilet. Through this programme, TCS demonstrated its commitment to ensure the safety and dignity of girl students; and their equal rights to sanitation and sanitary environments.



What did TCS do?

TCS envisaged a robust implementation approach and actively collaborated with the Central and State Government bodies, along with private organisations. The Company executed this programme in a sustainable manner, with their aid. TCS carefully chose partners from more than 40 manufacturers and service providers from the sanitation and infrastructure industry; evaluated based on multiple parameters such as capacity, credibility, potential to meet the turnaround time, distance of manufacturing unit from the place of installation and the local presence of manufacturer/dealer network in the selected states. TCS conducted a pilot study of the shortlisted models at the TCS Banyan Park office in Mumbai.



Project impact

- Improved health and hygiene, in turn, increased the enrolment rate of girl students in the adopted schools
- Fostered sustainable sanitation by promoting behaviour change among girl students and the broader communities
- Built awareness regarding the risks and hazards of open defecation, the need for water and waste management, and the importance of embracing good hygiene practices and maintaining a clean sanitation infrastructure
- Empowered girls to influence health conditions and play a larger economic role in their communities.



GOAL# 6 IMPACTS

- Hygienic Surroundings
- Lesser prevalence of disease

VALUE LEVERS FOR
THE COMPANY

- One of the few corporate contributors to this government campaign
- Enhanced Community relations
- Building the Brand

Key success factors:
What worked?

To maximise the efficiency and impact of the programme, TCS rolled out a robust technology enabled Management Information System (MIS) that served a threefold purpose: it enhanced programme monitoring through projections of planned vs actual progress; provided evidence of work completion through the feature of 'uploading site pictures'; and enabled a real-time control over programme activities through its mechanism for online sign-off of checklists defined for implementation partners. The overall and state specific progress dashboards were shared with the Ministry of Human Resource Development (MHRD) and State Authorities on a weekly basis.



Challenges

Bringing in a behavioural change in most rural populations is a still a challenge.

CASE STUDY 24

Watsan Project

Titan Co. Ltd. supported two projects in the Garhwal region of Uttarakhand, India. The projects were carried out in villages which were affected by the cloud bursts and flash floods of 2013.

What did Titan do?

One project was on livelihoods, and worked with 481 men across 20 villages, of two blocks, in Tehri district; while the other helped bring drinking water and sanitation to 11 villages of the district, covering 980 households.

Project impact

The projects, which were initiated in 2014, have begun to show results. Drinking water project schemes are now in the construction phase, and MD of Titan inaugurated the first completed WATSAN project scheme in Arogi village on December 7, 2016. The scheme will supply water to two villages in the hills.

Challenges

In hilly terrains, the biggest challenge is the location. The villages are susceptible to natural disasters and distance makes it hard to reach them.

Key success factors: What worked?

Himmotthan Society (an initiative of the Tata Trusts) involved the key stakeholders and the community right from the start. This helped them to bring in community ownership and involvement to complete the scheme in record time.



GOAL# 6 IMPACTS

- A complete drinking water facility through choices of Gravity based and other schemes in the chosen villages
- Sanitation facilities - 301 villages have been made Open Defecation Free
- About 918 households impacted

VALUE LEVERS FOR THE COMPANY

- Leveraged both people and material resources for operations
- Provided community service through partnerships of relevance and expertise

CASE STUDY 25

Gravity Flow Ultrafiltration for Safe Drinking Water for Tribals

Tata Projects Business Unit - Utility Services offers water purification related solutions for industrial and commercial segments. It has the expertise, resources and experience to manufacture high quality reverse osmosis based water purification plants with capacities of 200 litres per hour to 10,000 litres per hour. Tata Projects has the technology expertise to treat contaminated water laden with bacteria, viruses, total dissolved solids and other impurities like Lead and Arsenic. The Company ensures utmost purity and availability of safe drinking water.

What did Tata Projects do?

- Gravity flow ultrafiltration system is specifically designed to meet the challenge of providing clean water for tribal communities that do not have access to readily available potable water. The raw water is fed through gravity and collected in a water tank placed at a height of 2 meters, after which water collected is passed through a filtration plant. The gravitational pressure is used to filter suspended particles, water-borne bacteria and viruses from the water that's passing through, thereby letting out clean and safe drinking water for personal use of the tribal communities
- Reverse Osmosis plants are installed to dispense safe drinking water to the community. Tata Projects has developed an IT enabled system to dispense safe drinking water, which can be obtained once payment is validated. Appropriate dispensing of water is remote controlled for the purpose of accounting
- As per the system, every consumer in the community purchases a pre-paid card for collection of safe drinking water. The consumer swipes the card at the RO Plant vending point. The machine automatically starts dispensing the water and when water

- reaches the set quantity, the machine will automatically stop dispensing it
- These units are provided with battery back-up to dispense water during power failures
- To overcome this issue of frequent power failures and non-availability of electricity throughout the day, in the remote villages, integrated solar panels have been provided to help charge the battery to dispense water.

Project impact

- Consistent clean water
- Easy-to-handle product
- Reduction in wastage of water
- Reduction in Carbon Footprint
- Financial tracking to bankers for funding the entrepreneurs
- Safe drinking water for community
- Entrepreneurship development within AA community.

Challenges

Tata Projects in collaboration with Tata Trusts has taken a mission to improve the lives of tribal communities in and around

GOAL# 6 IMPACTS

- Safe drinking water for the community

VALUE LEVERS FOR THE COMPANY

- Safe drinking water for the tribal community
- Brand image, as strategic partner to AA community
- New product development

Key success factors: What worked?

Orissa. The tribals are scattered across villages. It was observed that access to safe drinking water was a challenge. The electricity, required to run Reverse Osmosis / Ultra Filtration plants is not available. The challenge to utility services was to provide accessible safe drinking water that can be operated without electricity for tribal villages.

- The following were the challenges:
- Wastage of water during collection
 - Collection of payment for consuming water
 - Full time operator required to operate the plant
 - Tracking and monitoring of water consumption.

Key success factors: What worked?

- Low operating cost
- Long module life
- IT-enabled system for dispensing safe drinking water for the community
- Integrated solar panel to charged the battery, for dispensing water.

GOAL #7



AFFORDABLE AND CLEAN ENERGY

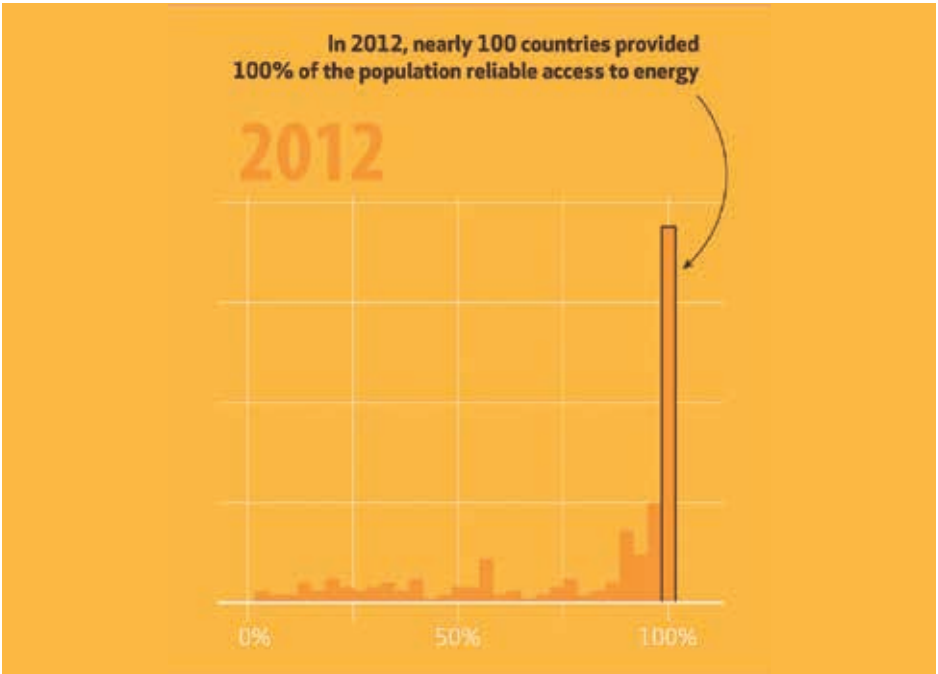
Ensure access to affordable, reliable, sustainable and modern energy for all

Energy production is a major challenge that the world faces today. It is important to enable access to modern energy services, improve efficiency and increase the use of renewable sources of energy.

WHY Goal #7 matters?

- 01. Distributed Power**
\$150 bn in capital investments in decentralised power installations in 2012
- 02. Renewable Energy**
7.7 times increase in installed capacity in the past decade
- 03. Increase in emissions**
Global CO₂ emissions increased by 46 per cent since 1990.

In 2012, only 100 countries provided reliable access to energy to 100 per cent of the population



By 2030, ensure universal access to affordable, reliable and modern energy services.

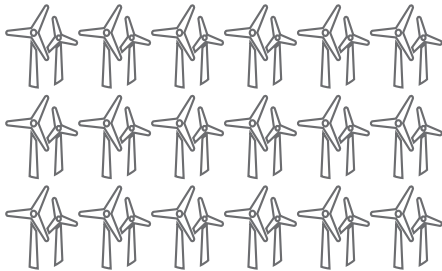
TARGETS under Goal #7

- 01.** By 2030, ensure universal access to affordable, reliable and modern energy services
- 02.** Increase substantially the share of renewable energy in the global energy mix by 2030
- 03.** Double the global rate of improvement in energy efficiency by 2030
- 04.** By 2030, enhance international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and clean energy technologies
- 05.** By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly LDCs and SIDs.



RENEWABLE ENERGY

7.7 times



Increase in installed capacity in the past decade.

BUSINESS & Goal #7: What's the connect?

A well-established energy system supports all sectors from

Households	Energy generation	Agriculture	Ecosystem	Industrial use
------------	-------------------	-------------	-----------	----------------

With investment in R&D, businesses can innovate and pioneer new technologies that change the status quo of the global energy system, becoming the center of climate change solutions.

BUSINESS & Goal #7: What's the connect?

Businesses can accelerate the transition to an affordable, reliable and sustainable energy system by...

Investing in renewable energy resources

Prioritising energy efficient practices

Adopting clean energy technologies and infrastructure

OPPORTUNITY for Business

Increased demand for clean energy provides new revenue and cost-saving opportunities.

RENEWABLE ENERGY over

\$131 bn

in investments in developing countries in 2014

DISTRIBUTED GENERATION

\$206 bn

investments in decentralised power installations by 2020

Businesses need to develop partnerships and invest in setting up clean, decentralised energy solutions with the help of digital solutions to help scale these solutions

How can business CONTRIBUTE to Goal #7?*

01. Ensure that all employees and their families have access to a reliable and affordable source of energy by investing in local infrastructure to establish accessible energy services

03. Reduce the internal demand for transport by prioritising telecommunications and incentivise less energy intensive modes such as train travel over auto and air travel

02. Commit to sourcing 100 per cent of operational electricity needs from renewable sources

04. Invest in R&D related to sustainable energy services, bringing new technologies to the market quickly

05. Integrate renewable energy into employee benefits packages, subsidising the capital expenditures associated with residential solar or electric vehicle investments

06. Prioritise energy efficiency across operations through tools such as the use of an internal carbon price and science-based target setting to reduce overall demand for energy.

**The above examples are non-exhaustive and some may be more relevant to certain industries than to others.*

Tata Power

CASE STUDY 26

Managing Energy Demand

Tata Power launched a wide variety of Demand Side Management (DSM) programmes for its customers in Mumbai, in June 2012. The programmes were initiated to encourage energy efficiency. These included - ceiling fan exchange for residential customers, energy audits, thermal storage technology for air conditioners and demand response for industrial and commercial customers.

What did Tata Power do?

- DSM schemes which have been active for Mumbai customers and were approved by MERC include: A 'Ceiling Fan Exchange' programme launched jointly with Havells India Ltd. for BEE 5 Star rated energy efficient ceiling fans. They were offered to consumers at ₹ 924/- a 50 per cent discount on market price which consumed only 50 Watts of energy which is 30 per cent less than the conventional fan
- A customer's premise was audited by a certified energy audit agency and recommendations were provided for achieving further reduction in energy consumption by paying only 25 per cent of the service fees
- Thermal storage technology was introduced for industrial / commercial customers who have large, central air-conditioning systems where chillers are run during the night to convert water to ice to cool the premises
- Consumers were asked to voluntarily reduce their load at a pre-determined time as required by the utility.

Project impact

- Consumption of 30 per cent less energy by use of 5 star rated ceiling fan
- Provided recommendations for reduction of over 12 million units after energy audit at 45 consumer locations
- Incentivised customers with ₹ 2 per unit saved under Demand Response Initiative
- Incentivised customers who shift their peak loads using thermal storage technology.

Key success factors: What worked?

- Tata Power launched several attractive DSM schemes for its customers in Mumbai under its special initiative 'My Mumbai Green Mumbai' to propagate energy conservation and efficiency in the country
- Design of specific DSM programmes which were classified across various consumer categories.

GOAL# 7 IMPACTS

- Energy security
- Energy efficiency

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Revenue



Challenges

Data collection and extensive research involving study of the consumer behavior, load variation patterns and determining peak load contributors was challenging to collate on various high energy consuming equipments used by consumers.

GOAL #8



DECENT WORK AND ECONOMIC GROWTH

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Promote inclusive and sustainable economic growth, employment and decent work for all. In order to eradicate poverty completely, economies need to create the conditions that allow people to have quality jobs. Sustainable economic growth requires employment opportunities that stimulate the economy.

- 05.** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

06. Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labor, eradicate forced labor, and by 2025 end child labour in all its forms including recruitment and use of child soldiers
- 07.** By 2020, substantially reduce the proportion of youth not in employment, education or training

08. Protect labour rights and promote safe and secure working environments of all workers, including migrant workers, particularly women migrants, and those in precarious employment

09. By 2030, devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products
- 10.** Strengthen the capacity of domestic financial institutions to encourage and to expand access to banking, insurance and financial services for all

11. Increase Aid for Trade support for developing countries, particularly LDCs, including through the Enhanced Integrated Framework for LDCs

12. By 2020, develop and operationalise a global strategy for youth employment and implement the ILO Global Jobs Pact.

GOAL #8

WHY Goal #8 matters?

- 01. Unused Skillset**
2.6 million skilled people may not have job opportunities every year until 2018

02. Technology
2.4 new jobs emerged for every job lost due to technology

03. Financial Services
2.5 billion people are currently financially excluded and can be targeted.

TARGETS under Goal #8

- 01.** Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7 per cent per annum GDP growth in the least-developed countries

02. Achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value-added and labor-intensive sectors

03. Promote development-oriented policies that support productive activities, decent job creation,
- entrepreneurship, creativity and innovation, and encourage formalisation and growth of micro, small and medium sized enterprises including through access to financial services

04. Improve progressively through 2030 global resource efficiency in consumption and production, and endeavor to decouple economic growth from environmental degradation in accordance with the 10-year framework of programs on sustainable consumption and production with developed countries taking the lead



New jobs emerged for every job lost due to technology.

The 75 per cent available male workforce in 1990 has decreased to around 70 per cent in 2013.



Sources: Labour force participation (No Ceilings) <http://data.worldbank.org/indicator/SL.TLF.CACT.MA.ZS>

Only 50 per cent of the women workforce-15 or older has been active in the workforce since 25 years.



Sources: Labour force participation (No Ceilings) <http://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS>

BUSINESS & Goal #8: What's the connect?

Substandard working conditions are often related to poverty, inequality and discrimination.

In many contexts, certain groups – such as workers with disabilities, women workers, youth, and migrants, among others – face particular obstacles in accessing decent work and may be especially vulnerable to abuses.

Companies that uphold labour standards across their own operations and value chains face lower risk of reputational damage and legal liability.

Instituting non-discriminatory practices and embracing diversity and inclusion will also lead to greater access to skilled, productive talent.

OPPORTUNITY for Business

SOCIO-ECONOMIC GROWTH

Some business opportunities can add revenue streams while driving socio-economic development

NEW CUSTOMER BASE

Provide basic services, infrastructure and opportunities to create a new customer base.

DRIVE EMPLOYMENT

Set up small businesses and a conducive environment near labour hubs to drive employment.

How can business CONTRIBUTE to Goal #8?*

01. Offer apprenticeship opportunities

02. Foster entrepreneurial culture and invest in or mentor young entrepreneurs

03. Initiate skills development programs moving down company supply chains

04. Put mechanisms to identify child labour and forced labour throughout global supply chains, and implement remediation for abuse

05. Install a firm policy against unfair hiring and recruitment practices.

06. Develop the physical and financial infrastructure and provide basic services in partnership with local stakeholders to set up business hubs to employ more people.

**The above examples are non-exhaustive and some may be more relevant to certain industries than to others.*

Tata Motors

CASE STUDY 28

LEAP Programme to Train Unemployed Youth for Motor Vehicle Mechanics (MMV)

Learn, Earn and Progress (LEAP) is a unique year-long programme where theoretical learning is supplemented with 'hands-on' work exposure. The students are economically supported through stipend which is paid through-out the nine-month internship period. The balance between theory and practice help students to become 'job-ready' immediately after completion of their course. The course curriculum has been approved by National Council for Vocational Training (NCVT) which provides students with opportunity to have their new skills formally recognised. This multi-stakeholder partnership between the Company, its dealers and training institutes has empowered youth to LEAP greater heights in their career.

What did Tata Motors do?

3.9 million skilled workforce is required in automotive section in India till 2022. To bridge this gap, trades having high employment potential such as Motor Vehicle Mechanic (MMV), were identified.

In the year long training programme of LEAP, a trainee is provided three months of classroom training at the Industrial Training Institute (ITI). Afterwards, the trainees are made to undergo a nine-month practical training at an authorised dealership/ service station. The ₹ 3,000 stipend is supported partially by Tata Motors and the dealer for every student admitted under the LEAP programme.

Tata Motors developed the course curriculum, trained the faculty members drawn from the implementation

partner, and supported in upgradation of training infrastructure of ITI through donation of vehicle aggregates.

The implementation partner mobilised the candidates and provided classroom training. During the nine months of practical training, the progress of students were tracked.

Tata Motors' dealers, apart from providing practical training, also offered jobs to the students after completion of training.

Key success factors: What worked?

Creating shared value through leveraging unique strengths of partners has helped in:

- Imparting quality training
- Employment opportunity for youth
- Improving quality of life.

GOAL# 8 IMPACTS

- Employment opportunity to youth
- Skill workforce for automotive sector

VALUE LEVERS FOR THE COMPANY

- Improve training quality

Project impact

The project was implemented in partnership with 40 ITIs and 27 dealerships across the country. In FY2016-17, more than 500 students have been enrolled in this training programme. Around 70 per cent students have found employment after completion of the training programme.

Challenges

In last three years, this programme has been well received by ITIs and Tata Motors' dealers. However, the limited training capacity at authorised dealerships / service stations restrains intake of students to some extent.

CASE STUDY 29

Livelihood and Skill Building

Taj Hotels has been involved in various skilling and livelihoods promotion initiatives. The company has focused on enabling sustainable livelihoods by imparting employment-enhancing vocational skills in hospitality. Taj’s Hospitality Skill Training Programme aims to enhance employability among school dropouts and less privileged youth, with a focus on youngsters from SC/ST communities.

What did Taj Hotels do?

Since 2008-09, Taj endeavoured to support less privileged and marginalised youngsters gain access to the field of hospitality. As part of its Hospitality Training Programme, short-term courses in house-keeping, food and beverage service and food production have been provided to the target beneficiary group. Taj began partnering with Tata STRIVE – the Tata group’s skilling initiative to drive quality and standardisation across its skill certification centres. Taj provides support in the form of curriculum development, guest lectures, joint certification as well as on-the-job training to the youngsters.

Project impact

Since FY2008-09, over 10,000 under privileged youth have been trained and certified in key hospitality traits under Taj’s Hospitality Skill Building Programme.

Challenges

- Mobilisation of youngsters, especially girls, to the programme given the long working hours in the hospitality sector
- Post-placement monitoring given the frequency of job change.



CASE STUDY 30

SAMARTH

India is going through a phase of rapid urbanisation. More and more people are expected to move to cities, which will pose many challenges in terms of employment, accommodation and place pressure on social services in the cities. The construction sector is the second largest employment opportunity provider after agriculture in India. People who look for such opportunities are mostly migrants and lack the requisite skills to excel in this sector. This poses a great challenge to the sector itself in terms of safety, quality, productivity and waste generation.

What did Tata Housing do?

As a responsible developer Tata Housing has set on a mission to train 1 lakh people by 2024. As a part of its skill development initiative, the company has trained 12,743 numbers of people in FY2015-16. The training is based on the requirement of the Indian Construction Industry and complies with the NSDC guidelines. After the training, due assessments are conducted and the candidates who successfully clear the assessments are given certifications. Tata Housing’s efforts in this area are aimed at empowering and developing the skills of the future leaders in the sector. This enhanced training and skill development would also help improve safety standards, enhance quality of work, reduce waste, help workers earn better wages and also improve the overall construction sector eco-system.

Challenges

- Retaining workers for a longer term that could have enabled better hand-holding and sustainable improvements
- Behavioral change towards safety aspects among workers.



Project impact

The impact assessment of the skill development training was conducted through third party agencies. The candidates were tracked over six months to monitor any improvements in productivity and wage earnings. As per the third party assessments, there has been an increase in productivity and quality of work. This has helped the candidates to improve their earning capacity over a period of time. The enhanced earnings enable spending on critical issues like health and children’s education. This led to the overall improvement in their quality of lives and also helped addressing intergenerational equity.

GOAL# 8 IMPACTS

- Increase per capita economic growth
- Full and productive employment and decent work for all

VALUE LEVERS FOR THE COMPANY

- Improve productivity
- Reduction of waste
- Improve quality

Key success factors: What worked?

- Providing hands-on skills training rather than class room training
- Flexible timing for training
- Stringent adherence to the curriculum
- Effective monitoring and evaluation of the training programme
- Buy-in of the major contractors for skill development of their workforce.

CASE STUDY 31

Right Skills. Bright Future.

Two-third of India’s 1.2 billion population is under 35 years, making the country one of the youngest in the world, from a demographic perspective. The economic benefit of having such a large working age population is obvious. However, a significant percentage of this population is unskilled or under-skilled. Skill building is therefore a key focus area for national development.

Tata STRIVE, an initiative of Tata Community Initiatives Trust, and the first Group CSR programme, addresses the pressing need of skilling India’s youth for employment, entrepreneurship and community enterprise. It reaches to communities, develops skills of people from financially challenged backgrounds and acclimatises them with the changing work environment.

Tata STRIVE has set up a replicable model for training and skill development, creating training capacity in select sectors and trades along with appropriate certification and measurement of outcomes.

What did Tata STRIVE do?

Tata STRIVE has aimed at creating training capacity in select sectors and trades along with appropriate certification and measurement of outcomes. Economically and socially challenged youth are provided access to the best-in-class training programmes designed by bringing together the ‘domain expertise from industry leaders’ and ‘personal transformation’ components created internally by its expert team. In order to deliver impact of scale Tata STRIVE works on a two pronged model – building Tata Strive Skill Development Centres (TSSDCS) and Tata STRIVE extension centres in different parts of India;simultaneously tremendous work has been carried out with partner centres (Government, NGOs, corporates) to help scale-up their training capacity and capability. A digital platform underpins the programme across the skilling value chain making it scalable and replicable.

Project impact

- Trained large number of youth for employment, entrepreneurship and community enterprise
- 53,000 students have experienced the STRIVE advantage (FY2016-17)
- Tata STRIVE has over 13 partners and has built a bouquet of over 14 job oriented courses
- Tata STRIVE is present across 8 states across 70 centres - including 20+ partner centres. Tata STRIVE has Skill Development Centres in Pune, Mohali, Mumbai, Aligarh and Hyderabad
- Tata STRIVE instituted ‘Empowerment Coaching for Facilitators’ - an exclusive training that’s designed to transform trainers to coaches and trained 400+ persons
- Robust technology platform provided scale and standardisation to the programme enabling innovation in skill development.

GOAL# 8 IMPACTS

- Skill development with a replicable model for training

VALUE LEVERS FOR THE COMPANY

- Availability of skilled workforce
- Access to domain expertise
- Heritage of community development
- Brand and reputation
- Technology capabilities

Key success factors: What worked?

- Replicable model with clear focus on quality
- Pre-onboarding processes towards informed career choice
- Youth development (Life Skills) accepted as a valuable offering
- Capacity building of trainers very well received
- Digital platform was the big game changer, generating wide interest
- Capabilities to conduct ‘Recognition of Prior Learning’ programmes.

Challenges

- There are several interrelated stakeholder challenges
- Youth – mismatch of expectations, sense of entitlement, short-term view
- Employers – lack of recognition of skills through higher wages
- Government – need for alternate forms of subsidy for the poor, need for focus on quality.

CASE STUDY 32

Ready Engineer Programme

Tata Technologies’ Corporate Sustainability Programme recognised the need for technical education as its core agenda. The initiative aims to meet the engineering industry’s demand for employable engineers and bridge the industry-institute gap through direct intervention. The company developed an industry-academia interface which would enable sustainable development of skill sets of engineering graduates.

What did Tata Technologies do?

Several studies revealed that in spite of the vast business potential, only 10 per cent of engineers graduating from Tier 2 or 3 cities in the country are employable. Graduate Engineer Trainees (GETs) interview and feedback by reporting managers highlighted the lack of skills or the ‘readiness’ of fresh graduates to be deployed on customer projects. As a part of Tata Technologies contribution to improving employability of the graduate engineers passing out of our Universities, the Company developed an industry – academia interface. This interface was developed as a coursework comprising of classroom and hands-on training in CATIA-V5, Basics of Automotive Design, Design-Analysis and Manufacturing technologies to an application based training of 40-50 hours. For ease the content delivery, an online knowledge management tool- ‘iGETIT’ was provided to each enrolled student for free of cost.

Challenges

- Extending the programme to colleges where, we do not have any physical presence, and where Infrastructure i.e. hardware, software, etc. is not available
- Effective monitoring while scaling up the programme in tier 2 and tier 3 cities.

Project impact

Since the inception of this programme in 2010, industry experts volunteered their time to provide class room training and interactions to over 800 students across cities where Tata Technologies operates. Over 2,500 students in 23 colleges have been trained via distance education in tier 2 and 3 cities in India. This distance education follows train the trainer model supplemented by the course management tool- iGETIT. Over 100 faculties from various engineering colleges have been trained by industry subject matter experts (SMEs).



GOAL# 8 IMPACTS

- Creating better quality engineers
- Bridge the industry- academia gap

VALUE LEVERS FOR THE COMPANY

- Creating high quality pool of resources that is available to industry including, competing companies
- Inculcation of a sense of social responsibility amongst students

Key success factors: What worked?

- In addition, application-based teaching worked better than theoretical learning resulting in better receptivity and understanding of the courses. The focus of this pedagogy was on knowledge sharing rather than performance in examinations
- Shorter time to onboard for GETs and be ready to work on actual projects once recruited as compared to the GETs without the Ready Engineer intervention.

CASE STUDY 33

Livelihood Generation for Rural Women

Okhai is a contemporary fashion brand that symbolises the empowerment of rural women. It promotes traditional handicraft techniques that are in danger of dying. Product innovation, strong process of distributed manufacturing and social media presence is helping Okhai grow every day.

Okhai has made a significant contribution to the lives of rural women by providing livelihood opportunities that help women empower themselves. Artisans working with Okhai, improved their economic as well as social status. They are now educating their children, improving their homes, travelling to cities and are respected in the village for having jobs.

What did Tata Chemicals do?

Okhai, as a brand was created and continues to be promoted by Tata Chemicals Limited and Tata Chemicals Society for Rural Development (TCSRSD) with the aim of generating empowerment in rural areas. The brand was built with the vision of setting up a sustainable business of rural handicrafts/ products, that helps in empowering women and uplifting their economic status.

Key success factors: What worked?

- Storytelling through social media helped gather patrons who genuinely supported the cause and helped reach more people
- Selling online helped Okhai enhance profitability, which resulted in higher impact for the same effort
- The same team has been with Okhai since 2014 which has doubled the impact
- Last year, Okhai created products that were first-of-its-kind designs in the industry and hence, enhanced demand.

Project impact

Okhai was set up by the Tata Chemicals Society for Rural Development (TCSRSD) in 2008. Over 500 rural artisans have benefited from this programme, through self-help groups (SHGs) and trained in the processes of modern handicraft production. Artisans have been earning a monthly income of ₹ 500 to ₹ 11,000 depending on the hours they work at home or the centre, their skill level and design difficulty. The idea was to ensure that women could work at their pace and in their homes while managing their household. A team of professional designers supported the cause, and helped Okhai develop products distinct from any other brand. Special training on embroidery techniques, tailoring, color theory, costing and design coupled with factory visits was provided on an ongoing basis to keep the women in touch with the latest trends, colours and fashions. In the current year, Okhai expanded to Kenya (40 artisans), Lucknow (90 artisans), Babrala (30 artisans), Ahmedabad (20 artisans), impacting 800 artisans through trainings or sale of their products. In the next five years, Okhai aims to impact 5,000 women.

GOAL# 8 IMPACTS

- Okhai hopes to empower 5,000 rural women by manufacturing and retailing their handmade products
- Wants to be India’s most loved ethical fashion brand, an artisan-led brand

VALUE LEVERS FOR THE COMPANY

- Women empowerment
- Ethical fashion
- Responsible manufacturing

Challenges

- Capacity of training and manufacturing handmade products on a large scale across rural locations
- Developed crafts with cost-effective methods to impact a large number of women in rural India
- Okhai is a women empowerment initiative, that alone is not sufficient for it to brand and sell the products the women make
- Limited resources to market like a fashion brand has been a challenge, yet has also led to frugal marketing techniques that have proved impactful.



Students from Tata STRIVE’s very first batch, in Aligarh, celebrate their graduation day. Close to 67,000 students have experienced the Tata STRIVE advantage, till date, directly and through empowerment coaching for facilitators.

GOAL #9



INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Promote innovation, industrialisation and creation of robust infrastructure. Sustainable development across the globe requires improved investments in infrastructure. Moreover, increased infrastructural investments will create employment, grow productivity and improve incomes.

05. Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, particularly developing countries

06. Facilitate sustainable and resilient infrastructure development in developing countries through
- enhanced financial, technological and technical support to African countries, LDCs, LLDCs and SIDs

07. Support domestic technology development, research and innovation in developing countries including by ensuring a conducive
- policy environment for inter alia industrial diversification and value addition to commodities

08. Significantly increase access to ICT and strive to provide universal and affordable access to internet in LDCs by 2020.

GOAL #9

WHY Goal #9 matters?

01. Need for resilience - 3.3 billion people will be living in urban areas in Asia by 2050

01. By committing to sustainable industrialisation and promoting innovation across company operations

02. Businesses can contribute to development efforts in the regions in which they operate
02. Inclusive industrialisation - Small and medium enterprises. account for 50 per cent to 60 per cent of total global employment

03. Through upgrading local infrastructure, investing in resilient energy and communications technologies

04. Making these technologies available to all people, including marginalised groups, who might not have access otherwise.
03. Technology as a catalyst - 80 per cent of CEO's feel that innovation drives efficiency.

By 2030, everyone will have access to the internet.

TARGETS under Goal #9

01. Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

02. Promote inclusive and sustainable industrialisation, and by 2030 raise significantly industry's share of employment and GDP in line with national circumstances, and double its share in LDCs
03. Increase the access of small-scale industrial and other enterprises, particularly in developing countries, to financial services including affordable credit and their integration into value chains and markets

04. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities



People will be living in urban areas in Asia by 2050.

BUSINESS & Goal #9: What's the connect?

Aging, degraded or non-existent infrastructure makes conducting business challenging. Basic infrastructure supporting technologies, communications, transportation, and sanitation is not universally available, hindering economic growth and societal progress.

Businesses can contribute through upgrading local infrastructure, investing in resilient energy and communications technologies, and making these technologies available to all people.

BUSINESS & Goal #9: What's the connect?

Businesses can promote inclusive infrastructure development by bringing smart technologies, valuable financial services and employment opportunities to underserved communities.

Invest in new, resilient infrastructure in developing countries or retrofit existing infrastructure to make it more sustainable.

Expand the geographic reach of research and development facilities, bringing R&D capabilities to developing countries.

Expand the geographic reach of research and development facilities, bringing R&D capabilities to developing countries.

Beyond infrastructure, business can influence many other dimensions of accessibility like:

Infrastructure investments	Access to financial services	Environmental investments	Smart technologies	Research and development	Knowledge sharing	Technology enabled frugal innovation	Developing inclusive solutions
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By committing to sustainable industrialisation and promoting innovation across company operations, businesses can contribute to development efforts through upgrading local infrastructure, investing in resilient energy and communications technologies, and making these technologies available to all people.

OPPORTUNITY for Business

Technology can help companies capitalise on the market opportunity presented by the infrastructure sector

Untapped opportunity

\$4tn

infrastructure investment is needed globally as of 2014

Efficiency improvements

15%

performance improvement in buildings can be achieved through intelligent commissioning

Businesses need to develop resilient and sustainable products, integrate layers across products and services and collaborate with industry/ cross-industry players to drive infrastructure improvements

How can business CONTRIBUTE to Goal #9?*

01. Invest in new, resilient infrastructure in developing countries or retrofit existing infrastructure to make it more sustainable

02. Promote innovation by giving all stakeholders the opportunity to offer creative solutions to sustainability
- challenges. Further scope out the good ideas and offer awards to the best

03. Consult and engage a wide range of stakeholders, including minority groups, to ensure that infrastructure development benefits and creates opportunities for all
04. Establish standards and promote regulation that ensure company projects and initiatives are sustainably managed

05. Collaborate with NGOs and the public sector to help promote sustainable growth within developing countries.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Rallis

CASE STUDY 34

Making Waves with Water

Mission Jal Dhan and Jal Mitra formed an integrated watershed management project aimed at increasing livelihoods. The project aimed to improve agri-productivity of small and marginal farmers through watershed interventions, women empowerment and skill development. The watershed component is focused on constructing various temporary and permanent structures like loose boulder, diversion dam, check dam, and afforestation, among others.

What did Rallis do?

- Water management is an area focus for Rallis India and the Tata group. Rallis' flagship programme water management is named as "Jal Dhan". Jal Dhan was started four years back with those sites which experience water scarcity during summer due to inadequate conservation measures and storage capabilities. Rallis, as per the topography, designs Rain Water harvesting projects with interventions aimed at reducing force of runway rain water, increasing the aquifer and constructing water storage and recharge infrastructure
- The project also aimed to regulate demand pressures for water consumption by providing training to farmers in modern agricultural practices that use less water e.g. drip irrigation, sprinklers etc
- Rallis implements the project in partnership with villagers, which helps to sustain the project in long run and ownership of the intervention lies with the villagers.
- Rallis acts as knowledge partner, technology expert and funding partner and villagers acts as implementing partners.

Project impact

- Increase in water table and access to portable water for over 65,000 beneficiaries
- Increase in agricultural productivity
- Increased seasonal vegetable crop cultivation
- Increase in average annual income
- Established linkages with the government machinery.

Key success factors: What worked?

- The project interventions are based on community needs. Conducting thorough need assessment before start of the project
- Engaging stakeholders through a participatory approach that sought ownership of the project among the beneficiaries through 'Shram Dan' – providing service for community works
- An integrated approach to development addressing a wide range of community needs through several projects targeting specific aspects such as income generation, skills development, modernisation of agricultural practices, alternate livelihoods.

GOAL# 9 IMPACTS

- Water neutral, Water availability for life and livelihood
- Social infrastructure
- Frugal innovation
- Community development

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Community relations
- Future growth

Challenges

- Developing mutual trust with villagers and convincing them of the project's benefits as they initially wanted monetary donations
- Local politics and political interest
- Motivating women to participate in project activities.



CASE STUDY 35

Business Innovation: Tata TISCON-S Super Ductile Rebar

Through its subsidiaries, Tata Steel Thailand (TSTH) manufactures rebars, wire rods and small sections. Rebar products comprise round bars and deformed bars that are used mainly in the construction industry, including roads, bridges, buildings and houses.

In 2015, TSTH developed and launched a new rebar product with seismic resistance properties. It was launched under the brand umbrella of TATA TISCON and it was called 'Super Ductile' (SD) rebars. The new rebar product complies with international quality standards to provide seismic resistance. Thus, it provides higher safety and better protection to the building structures in Thailand.

What did Tata Steel do?

The TATA TISCON Super Ductile rebar possesses greater Ultimate Tensile Strength (UTS) and ductility than what's specified for rebars in the standard of SD40. This ensures that the rebar provides enhanced safety during earthquakes. Due to higher UTS, the Super Ductile rebar has better bend-ability resulting in ease at work sites as well.

Project impact

- In addition to higher ductility which resulted in ease of work at work sites, the rebar has resulted in reduced wastage at the work site as well due to its cut and bend-ability
- The product, launched for the first time in Thailand, provides customers with a new option to enhance safety of the building structures in higher seismic zones.

Key success factors: What worked?

- Excellent Higher Ductile: The controlled process of manufacturing the rebar under the Tata Steel process helps develop higher elongation and maintains the quality of SD40 strength. This gives the product better absorption capacity during earthquakes than other normal grades of rebar
- Benefits for Consumer, Public and Society: The product has great safety benefits when used in the construction of infrastructure
- No Wastages due to Cut and Bend Process: Traditional construction work processes on rebar causes waste of unused steel. Workers are usually required to manually cut and bend straight rebar to the required shape and form when filling in construction structures. This manual effort sometimes results in cutting rebars in inaccurate lengths and shapes. To provide a permanent cut and bend solution for finished parts, Super Ductile rebars aim to improve the construction industry by working with contractors and customers. The Company delivered unique finished products for each project

GOAL# 9 IMPACTS

- Enhanced safety and security for consumers/customers
- Less wastage
- Product innovation

VALUE LEVERS FOR THE COMPANY

- Ensure market for Tata TISCON rebar
- Preferred supplier of responsible steel

- High Quality Standard: The Tata TISCON Super Ductile rebar, is made from high-quality rebar giving it superior strength and ductility when compared to other unknown rebars in the market. This helps reduce: any accidents during rebar cutting at a construction sites, less energy consumption during rebar production and low delivery cost.

Challenges

The seismic rebar is not popular in Thailand and does not meet Thai Industrial Standards (TIS). Better plans for its promotion needs to be implemented to share the benefits of this product with Tata Steel Thailand's influencer community - consisting of designers, home builders/developers, government agencies and dealers. The company's market development team and sales team would also need to build a better understanding of this product among potential target audiences.

CASE STUDY 36

Combining Smart Engineering with Smart Science to launch Smart Water Solutions

In 2014, Voltas Water Solutions (VWS) announced its commitment to serve the growing water and wastewater treatment needs of the country. VWS is a 50:50 joint venture between Voltas Ltd. and Dow Chemical Pacific (Singapore) Pvt. Ltd. (a member of the Dow Group of Companies). In line with this commitment, VWS launched new products in categories such as packaged RO water purifiers, skid-mounted water treatment systems and packaged sewage treatment plants.

What did Voltas Water Solutions do?

- The GET.SET.RO. by VWS is one of the safest ways of obtaining purified drinking water. It is ideal for offices, schools/colleges and urban infrastructure. It is characterised by high recovery of water through FILMTEC™RO elements that results in low wastage as compared to home water purifiers. This makes it a more efficient and eco-friendly solution. Sewage Treatment Plants (STPs) - Every STP is optimally designed to provide an economical solution for reuse of water. These plug-and-play systems are engineered with the most stringent physical and biological standards to obtain a water suitable for reuse in gardening, cleaning and washing. The features include compact design and durability, easy installations, economy and energy efficiency, and absence of odour
- The Water ATM is a conveniently located coin or smart card-operated dispenser that can dispense pure drinking water, when connected to any water source, at an extremely cost-effective level. This water vending machine is targeted at urban and rural localities that do not have access to clean drinking water
- The new VWS products have been engineered to provide maximum

output and performance, along with the lowest-in-class footprint that make them space and cost-efficient. Users can monitor the system from any location, using the Voltas Water Smart Monitoring App, and through web access from PCs or tablets.

Project impact

The Water ATM aims to relieve men and women from spending hours daily in fetching water, often from ground-water sources that are often contaminated. In most cases, these are the source for water-borne diseases. With its distinctive features - 8 stages of filtration including reverse osmosis Voltas Water ATM is a safe, durable and secure source of purified drinking water for communities and public places.

Challenges

The water purification industry is marked by several players - organised and unorganised, vying for the customer's wallet share. Although there are a few branded players competing with Voltas Water, the market is majorly dominated by unorganised players, constituting up to 75% of the market.

GOAL# 9 IMPACTS

- Safe drinking water for the community
- Less wastage of water

VALUE LEVERS FOR THE COMPANY

- Innovation
- Resource efficiency
- Brand enhancement

Key success factors: What worked?

- VWS aims at providing reliable, sustainable and branded solutions in the market dominated by unorganised players. This makes VWS' Point of Entry (POE) the ideal substitutes for point of use purifiers or home purifiers, bottled water or jericans at commercial and institutional setups.
- India is the first country in the world to mandate minimum CSR spending of 2% of the average profits. Most of the NGOs and Corporate CSRs are collaborating to achieve better health outcomes through CSR initiatives in the area of Water and Healthcare. It is along these lines that VWS launched its Water ATM initiative, focusing on providing a convenient and inexpensive source of safe potable water to rural communities. There is a great in-house opportunity for business within the Tata group to grow this initiative
- We are expecting GST to be a game changer for organised players. The dominance of unorganised players is likely to decline after GST comes into play.

GOAL #10



REDUCED INEQUALITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

Diminish inequality within and among countries. Countries across the globe have tried notably to eliminate differences. However, inequality still persists and large disparities remain in terms of access to basic services and assets. There is a need for policies which pay attention to the needs of disadvantaged and marginalised populations.

- 07.** Facilitate orderly, safe, regular and responsible migration and mobility of people, including through implementation of planned and well-managed migration policies

08. Implement the principle of special and differential treatment for
- developing countries, in particular least developed countries, in accordance with WTO agreements

09. Encourage ODA and financial flows, including foreign direct investment, to states where the need is greatest, in particular LDCs, African countries,
- SIDs, and LLDCs, in accordance with their national plans and programs

10. By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent.

GOAL #10

WHY Goal #10 matters?

- The wealth gap: 85 of the wealthiest people own the equivalent of the bottom 50 per cent of the global population.

Gender inequality: Globally, women typically earn 24 per cent less than men,
- with majority of jobs being informal or unprotected.

Eliminating poverty: Over 2.1 billion people in the developing world live on less than US\$ 3.10 a day.
- Income inequality and gender discrimination erodes the quality of life and impedes economic growth**
- 01.** More than 75 per cent of the population is living today in societies where income is more unequally distributed than it was in the 1990s

02. Inequality harms growth and poverty reduction, the quality of relations in the public and political spheres and individuals' sense of fulfilment and self-worth.

TARGETS under Goal #10

- 01.** By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average

02. By 2030, empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

03. Ensure equal opportunity and reduce inequalities of outcome, including through eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and actions in this regard
- 04.** Adopt policies especially fiscal, wage, and social protection policies and progressively achieve greater equality

05. Improve regulation and monitoring of global financial markets and institutions and strengthen implementation of such regulations

06. Ensure enhanced representation and voice of developing countries in decision making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions



The wealthiest people own the equivalent of the bottom 50 per cent of the global population

BUSINESS & Goal #10: What's the connect?

- The richest 1 per cent of the world's population now control up to 40 per cent of global assets, while the poorest half owns just one per cent.

Inequalities in income and wealth are severe and have been widening globally.
- Businesses are engines for economic growth, having the potential to create jobs, foster economic activity through their value chain, and contribute tax revenues for public services and infrastructure.

Invest in new, resilient infrastructure in developing countries or retrofit existing infrastructure to make it more sustainable.

Businesses should try to address adverse impacts with which they may be involved through third parties such as suppliers.

Companies and Governments are increasingly recognised as having a significant impact on human rights, which may exacerbate or improve inequality.

BUSINESS & Goal #10: What’s the connect?

Beyond income, businesses can influence many other dimensions of inequality like:

Equal rights	Fair wages	Gender diversity	Skills development	Economic inclusion	Products and services for low income groups	Equal opportunity	Personal security
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In addition, to avoid contributing to inequality; business can also have a positive impact on addressing inequality through inclusive business models that provide empowerment for marginalised groups in the workplace, marketplace and community.

OPPORTUNITY for Business

Base of the pyramid (BOP) presents a huge market opportunity for existing and new products.

- Develop programmes and services to empower the poor through Self Help Groups (SHGs)
 - Develop skills and promote technology access to improve BOP livelihood
- Enact a diversity agenda to build a productive and balanced workforce.

Businesses need to create an enabling environment for the underprivileged and leverage improved processes and higher productivity to develop products that suit their needs.

How can business CONTRIBUTE to Goal #10?*

01. Develop products and services tailored for poor customers (e.g. mobile based money transfer services for unbanked consumers)

02. Improve access to basic goods and services for people living in poverty (e.g. through core business, policy dialogue, social investment)

03. Recruit, train and employ local community members, including those living in poverty, and integrate them in your value chain (as producers, suppliers, distributors, vendors)

04. Invest in business-driven poverty eradication activities (e.g. develop living wage policy.

05. Partner with civil society networks to provide education and entrepreneurial skills training.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Teleservices Limited

CASE STUDY 37

Bridging the Divide

Tata Teleservices Limited (TTSL) is committed to creating opportunities of equality and is against preferentialism. This initiative aimed to empower the differently-abled and integrate them into the mainstream.

What did Tata Teleservices Limited do?

- Tata Teleservices used technology to provide differently-abled individuals with employment and opportunity
- In an effort to provide visually impaired people with equal employment opportunities and make them self-reliant and economically independent, TTSL set up two call centers under the banner-‘Drishti’
- TTSL’s Software Development Centre in Bangalore developed a customised interactive voice response (IVR) system that facilitates back-office operations. Each executive has two telephones on their desk. A list of customers and telephone numbers is extracted from the central hub of Tata Teleservices’ CRM system and is fed into the IVR
- Apart from technological support, a dedicated team at TTSL trained executives on the required skills, improving their employability and opening up new avenues for them in the booming BPO industry. TTSL has provided special training tools such as a script in Braille and recorded audiotapes with conversations between customers and agents; these are used by Drishti employees to practice ideal responses to customer calls.

Project impact

- 29 visually challenged executives are employed across TTSL
- Empowering differently-abled individuals to earn income independently
- Promoting diversity
- Awards and recognition: This initiative has received the TEMA National Telecom Award for connecting people with disabilities and the Mrs Pilloo Dorab Khambatta Memorial Award for ‘Best Employer of Blind Persons’
- Project is currently being replicated in Uttar Pradesh in partnership with National Institute of the Visually Challenged
- IVR system can be extended to other business applications across industries and sectors.

Challenges

- Developing an ICT tool to aid visually impaired individuals to perform tasks seamlessly
- Individuals with disabilities face obstacles like monsoons, long distances and travel times.

GOAL# 10 IMPACTS

- Inclusive growth
- Diversity
- Quality of life

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Diverse workforce
- Grow revenues

Key success factors: What worked?

- TTSL leveraged its core competency and the facilities to develop tools to enable visually impaired individuals to work in a BPO
- Automating various processes to simplify interface with visually impaired individuals
- Providing adequate support, in terms of training, to individuals with disabilities to execute various jobs
- Partnering with organisations that specialise on working with differently-abled individuals.

CASE STUDY 38

Caring for Communities

The concept and practice of sustainability is at the core of all Tata Chemicals’ activities, including its corporate social responsibility initiatives. This is the basis for Tata Chemicals Society for Rural Development (TCSRDR), the community intervention programme that helped change the lives of hundreds of people that live around Tata Chemicals factories across the globe.

What did Tata Chemicals do?

- TCSRDR focused on natural resource management, conservation of biodiversity and development of entrepreneurship programmes to promote self-employment
- Other projects included biodiversity conservation rainwater harvesting and the commissioning of reverse osmosis plants to help improve drinking water quality
- Launched the Tata Kisan Sansar network in India that encourages rural entrepreneurship, capability building and co-creation of value among farmers
- In 2008, the 28th year of its inception, significant new initiatives were launched, including the setting up of rural BPOs and the Karjobi promotion at Babrala
- Development programmes have been implemented in the Indian cities of Mithapur, Babrala and Haldia to promote local handicrafts through social entrepreneurship.

Project impact

- Over three decades of community development
- Focus areas included – social enterprise, infrastructural development, agricultural enhancement, alternative livelihoods, education etc.
- Impacted over 1 million individuals
- Implemented social initiatives primarily around its business operations
- Introduced new technologies to set up rural BPOs
- Expanded its reach to Kenya and Europe.

Challenges

- Empower neighbouring communities towards achieving self-sufficiency
- Developing rural economies that are stable and sustainable.

GOAL# 10 IMPACTS

- Reducing inequalities
- Employment
- Quality of life

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Reduced risk
- Revenue growth

Key success factors: What worked?

- An integrated and participatory approach followed by TCSRDR, ensured that the community members become the real managers and owners of initiatives and work towards their own development
- The company took technology to rural India by setting up rural BPO centers that provide new age employment opportunities to the non-urban population
- Took into account location specific and business specific concerns, and requirements while implementing the community development initiatives
- To assess the impact of their community development interventions, TCSRDR conducts the community satisfaction survey every year.

CASE STUDY 39

Agriculture Development through Lift Irrigation (LI) Project

The Lift Irrigation project provided an assured perennial irrigation facility to farmers. Water from perennial sources, like rivers, is lifted through motor pumps to the adjoining agricultural plots. An underground network of pipelines helps to draw and discharge water at selected points. This enables farmers practice multiple cropping, instead of mono-cropping, which in turn leads to higher incomes.

What did Tata Motors do?

Tata Motors has commissioned 15 Lift Irrigation projects for farmers who are largely from the Affirmative Action communities. These farmers were bereft of assured irrigation which limited them to practice rain fed mono-cropping on their parched land. The farmers were motivated to adopt LI units, a departure from their traditional and mono-cropping practices which yielded just one paddy crop, with some seasonal vegetable cultivation, these practices did not help them even subsist. Migrating to the towns for menial jobs was a natural phenomenon which was leading to gradual alienation from agriculture.

The 15 LI units installed are perennially irrigating over 500 acres of arable land benefitting 531 farmer families, constituting 70 per cent ST farmers. The aim of this project was to institutionalise the farming community for joint ownership of the irrigation facility and to enhance their capacity to adopt multiple-cropping practices by growing paddy twice and growing vegetables, spinach lentils, oil seeds, pulses, maize and wheat.

Project impact

- 70 per cent of beneficiaries now practice multiple-cropping throughout the year
- Their income level has risen by ₹ 7,000/- to ₹ 8,000/- resulting in an improved quality of life
- The cropping intensity has risen from 114 per cent to 165 per cent.
- The farmers have been trained to manage the LI units on their own and sustain.

Challenges

A major challenge was to institutionalise the farmers to manage a joint initiative and own the Lift Irrigation structure for sustainable use. The onerous task of mitigating conflicts between farmers benefitting and non-beneficiaries was also a challenge.



GOAL# 10 IMPACTS

- Assured perennial irrigation
- Multiple-cropping
- Raised cropping intensity
- Higher income
- Improved lives

VALUE LEVERS FOR THE COMPANY

- Proven model
- Improved quality of life
- Increased trusteeship
- Adding to brand image

Key success factors: What worked?

- Deployment of participatory planning tools
- Collective execution of the work by farmers which was facilitated by trained human resource having good rapport with them
- Training on modern agricultural practices through linkages with the scientific community
- Demonstrated benefits of the LI project helped replicate the same model in different villages. On reaping benefits of multiple cropping, they grew newer crops which proved successful too.

CASE STUDY 40

Making “Model Village - Kadachimeth, Jawhar” in Tribal Land through Socio-Economic Development

India has about 7 lakh villages, of which thousands are bereft of electricity, infrastructure and sound education facilities. Understanding the importance of developing villages to fast-track India’s growth story, in 2014 Tata Power announced its commitment to transform Kadachimeth, a tribal village in the Thane District of Maharashtra, into a model village by 2017 – i.e. one with good roads, good education facilities, medical outreach, and solid infrastructure so that the village becomes a role model for the neighbouring villages to emulate.

GOAL# 10 IMPACTS

- Improve economic capacities
- Entrepreneurship

VALUE LEVERS FOR THE COMPANY

- Build social capital



What did Tata Power do?

- Supported livelihood initiatives such as promotion of agriculture practices, poultry farming, bee keeping, tailoring and more to increase annual household income
- Skill development programmes were set up for youth and employability skills were built for the students to secure employment opportunities
- Capacity building of communities was conducted through SHG strengthening and village Development committees to generate ownership and sustainability of programmes
- Awareness and interventions on water, sanitation and hygiene
- Provided basic health facilities and education
- Promotion of tribal art such as warli painting
- Integrated watershed management practices were put in place to increase irrigated land and enhance agricultural productivity
- Infrastructure development of community institutes was also conducted.



Project impact

- 100 per cent of women in the area were empowered through SHG linking and have received secured livelihood opportunities to support their families
- Watershed programmes showed significant impact, 90 per cent of farmers taking only Karif crop were ready to take Rabi crop through water restoration. Thirty-seven acres of land is now under irrigation
- The initiative helped secure basic entitlements like caste certificate and enabled villagers to get government schemes
- Generated social awareness and an aspiration to work for development, among communities.



Key success factors: What worked?

- Support from community, village leaders and active youth volunteers
- Timely inputs of senior leaders from corporates
- Employee volunteering.



Challenges

- Finding implementing partners in the remote village
- Time-bound programme (as this is three-year programme).



With support from Tata Chemicals Society for Rural Development, women in Mithapur and Babrala are being supported in their entrepreneurship ventures. Along with the products like Karzobi, honey and incense sticks, bandhani has also been introduced. Women producers groups are also formed for financing and manufacturing of these products.

GOAL #11



SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

It is important to maintain cities that continue to create jobs and prosperity while not straining land and resources. The challenges that cities face like congestion, lack of funds, shortage of adequate housing etc. need to be looked into to create future-ready cities.

women and children, older persons and persons with disabilities

08. Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

09. By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change and resilience to disasters

10. Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilising local materials.

WHY Goal #11 matters?

01. Rapid urbanisation

60 per cent of the world's population will be city dwellers by 2030

02. Unsustainable consumption

60 per cent to 80 per cent of the planet's resources are consumed by only 3 per cent of Earth's area

03. Financing gap

\$174.4 bn global investment in technologies is required to support sustainable cities.

Unplanned growth leads to increased:

- Stress on urban infrastructure for water and electricity
- Crime and other social problems.
- Infectious disease epidemics
- Pollution
- Urban heat island affecting local weather patterns.

TARGETS under Goal #11

01. By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

02. By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

03. By 2030, enhance inclusive and sustainable urbanisation and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

04. Strengthen efforts to protect and safeguard the world's cultural and natural heritage

05. By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses

relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

06. By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

07. By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for

More people are living in urban areas and the proportion is increasing...



BUSINESS & Goal #11: What's the connect?

Cities can realise their sustainability objectives by engaging with business to leveraging their capability in identifying innovative and cost-effective solutions to complex, cross-cutting urban sustainability challenges.

Business can play a vital role not only in providing specific infrastructure, technology, services and financing solutions.

Contributing to strategies that will support the overall optimisation of urban systems to create inclusive, safe, sustainable and disaster resilient cities.

Engage with policy makers at the planning stage to identify innovative and cost-effective solutions to complex, cross-cutting urban sustainability challenges.

Cities have considerable potential to emerge as hubs that improve quality of life and minimise carbon footprints.

Access to affordable housing

Infrastructure investments

Sustainable transportation

Access to public space

Access to healthcare & sanitation

Sustainable buildings

Waste management

Personal Security

Businesses must collaborate with cities and governments to find solutions to future needs to secure sustainable development goals.

OPPORTUNITY for Business

The need to sustainably support rapid urbanisation is creating new market opportunities...

CONNECTED DEVICES

2.7bn

connected devices will be in use in smart cities by 2017

ENERGY MANAGEMENT SYSTEMS

Market will grow from

\$7.7bn in 2013 to

\$24.2bn in 2020

ELECTRIC VEHICLES

Market will grow

\$83.5bn in 2012 to

\$271.7bn in 2019

Strong and rapid urbanisation requires sustainable technology transfer through innovative financial instruments and mechanisms

How can business CONTRIBUTE to Goal #11?*

- 01.** Jointly develop and/or participate with relevant stakeholders through a common and neutral platform to jointly analyse, discuss and act on urban functionality, and resilience

02. Use expertise to help build capacity of building owners to improve energy efficiency in buildings and enable sound building management
- 03.** Collaborate with cities and governments to find solutions to mobility needs that minimise environmental impact while making transportation safer, affordable for all

04. Reform private sector finance investment strategies to support integrated and sustainable urban development
- 05.** Invest in safe and sustainable infrastructure in the community and or city of operation, including lighting, transportation, alarm systems etc.

**The above examples are non-exhaustive and some may be more relevant to certain industries than to others.*



CASE STUDY 41

BIG: Beautiful Is Green

BIG: Beautiful is Green is an initiative by Tata Housing that demonstrates its commitment to environment excellence across its value chain. Tata Housing projects account for nearly a third of green development in the Indian real estate business, with 55 million sq ft of the total 1.55 million sq ft of eco-friendly construction in India.

What did Tata Housing do?

- Initiatives implemented by Tata Housing include design and development of green products certified by Indian Green Building Council/LEED that optimise utilisation of resources while developing properties including cement, water, steel and energy by adopting cutting edge technologies
- Tata Housing maps its carbon footprint at offices and project sites. Energy efficient BEE rated light fixtures, solar lighting, drought resistant plant species, efficient method of irrigation of landscapes, and rainwater harvesting are some of the measures taken to reduce the carbon footprint. Additionally, soil preservation, local material consumption, reuse of salvaged materials, wind turbine ventilators, and light-off policy at stipulated times helps the Company to maintain ecological balance. Besides, the Company follows ACs at optimum temperature, rail travel instead of air travel, car-pooling and video/audio-conferencing, among others to diminish its carbon footprint
- Planting trees and creating green zones in and around its business operations to neutralise its carbon footprint
- Partnering with WWF-India on a wide range of conservation projects including Red Panda Conservation, and 'Wake up to nature', among others.

Project impact

- 54 million litres of water conserved
- 1,593 tons of abated carbon emissions
- The recycled content of the materials is at least 20 per cent of the total materials by cost
- Over 6,000 trees have been planted
- Developed green products certified by Indian Green Building Council/ LEED
- Tata Housing received the 'Golden Peacock Eco - Innovation Award' for its efforts.

Challenges

- Changing the traditional paradigm in the real estate and construction industry which has historically been a major contributor to environmental degradation
- Low levels of awareness of green construction techniques and technologies in the supply chain.

GOAL# 11 IMPACTS

- Green buildings
- Clean energy systems
- Conserve biodiversity

VALUE LEVERS FOR THE COMPANY

- Build Brand
- Cost reduction
- Grow revenue



Key success factors: What worked?

- Taking the lead in adopting innovative and sustainable practices in India, Tata Housing launched a concerted drive to build eco-friendly and green buildings
- Developing certified green products
- Actively measuring carbon emissions at all projects and setting carbon reduction targets on a per square foot basis
- Spreading awareness about the benefits of green buildings to customers.



The Tata group's Headquarters won a platinum rating by the Indian Green Building Council for Sustainable Practices. (March 9, 2016).

GOAL #12



RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

Sustainable consumption and production patterns ensures promoting resource and energy efficiency, sustainable infrastructure, and providing access to basic services, food and decent jobs for all. Its implementation helps to achieve overall development plans, strengthen economic competitiveness and reduce poverty.

- 07.** Promote public procurement practices that are sustainable in accordance with national policies and priorities

08. By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

09. Support developing countries to strengthen their scientific and technological capacities to move towards more sustainable patterns of consumption and production
- 10.** Develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products

11. Rationalise inefficient fossil fuel subsidies that encourage wasteful consumption by removing market

distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimising the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

GOAL #12

WHY Goal #12 matters?

- 01. Unsustainable demand**
1.6 times Earth's worth of resources are being consumed by the global population

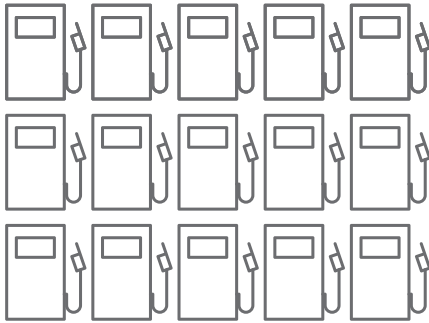
02. High extraction price
61.5 per cent increase in commodity price index for 1 per cent increase in GDP

03. Stressed ecosystems
More than 60 per cent of Earth's ecosystems are seriously degraded.

Comparing global resource use scenarios

Whilst the estimates from each of the models differ, they all point to significant rise in resource use, far beyond the carrying capacity of the planet, if immediate action is not taken to address resource efficiency.

UNSUSTAINABLE DEMAND



Earth's worth of resources are being consumed by the global population

TARGETS under Goal #12

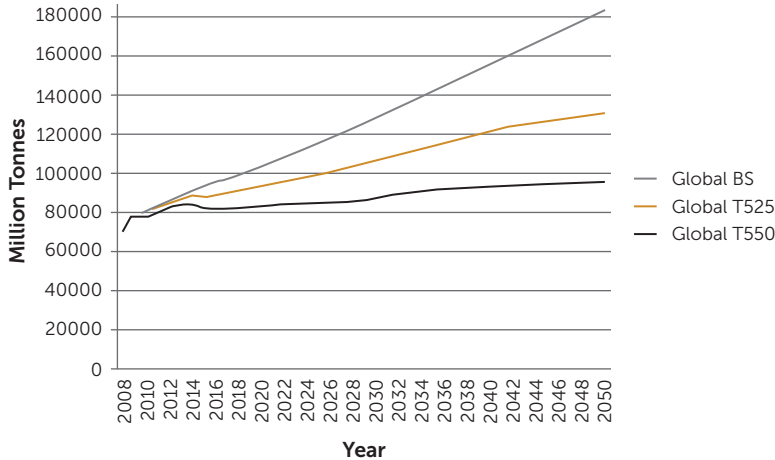
- 01.** Implement the 10-Year Framework of Programs on sustainable consumption and production (10YFP), all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

02. By 2030, achieve sustainable management and efficient use of natural resources

03. By 2030, halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses
- 04.** By 2020, achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimise their adverse impacts on human health and the environment

05. By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

06. Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle



Sources: CSIRO Global Environment – Economy Model 2013

BUSINESS & Goal #12: What’s the connect?

Sustainable practices in the production phase of products and services will NOT provide sufficient responses to meet.

Emission reduction targets	Natural resource constraints	Demand for basic needs	Access to energy
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Sustainable consumption along with sustainable production will be required.

Demand for materials will likely outpace efficiency gains in supply chains as well as overwhelm already stretched ecosystem services.

It is in the interest of business to find new solutions that enable sustainable consumption and production patterns.

Identifying “hot spots” within the value chain where interventions have the greatest potential to improve the environmental and social impact of the system, as a whole, is a crucial first step.

Then use innovative power to design appropriate solutions that can both enable and inspire individuals to lead more sustainable lifestyles, reducing impacts and improving well-being.



OPPORTUNITY for Business

Increasing relevance of resource efficiency is reducing costs and creating new revenue opportunities.

BIODEGRADABLE PLASTICS

\$2_{bn}

to

\$3.4_{bn}

growth in market value between

2015 & 2020

Businesses need to develop processes and capabilities for reuse and recovery and establish supply chain traceability to identify waste-recovery opportunities.

AUTOMOTIVE REMANUFACTURING

\$139.8_{bn}

market size by

2020

CIRCULAR OPPORTUNITY IN TEXTILES

\$59.5_{bn}

to

\$70.5_{bn}

cost savings per year in apparel industry from shift to a circular economy

How can business CONTRIBUTE to Goal #12?*

01.

Implement product portfolio analysis tools to understand environmental and social footprint of products within lifestyles as well as production. Innovation must align products and applications to appropriately address sustainability megatrends
02.

Develop innovative business models such as moving from selling products to selling services, to retain ownership of the products and help close the material loop
03.

Enabling sustainable consumption, by developing innovative solutions, can reduce energy need in usage and educate consumers about these benefits
04.

Reduce manufacturing impacts by substituting virgin raw materials in products with post-consumer materials through recycling and upcycling
05.

Apply modular design, so products’ constituent parts will be easily separated and either re-used without further processing, or easily recycled near the point of disposal
06.

Significantly reduce waste and ensure that any unavoidable waste is utilised to the fullest degree (e.g. organic waste as fuel or fertilizer).

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

CASE STUDY 42

A Closed Loop Value Chain

Jaguar Land Rover (JLR) has carried out life cycle assessment for its fleet and has been successfully implementing the concept of circular economy. Their REALCAR (Recycled Aluminium Car) project is focused on closed loop supply chain.

What did Jaguar Land Rover do?

- JLR created a unique closed-loop process by teaming up with their key supplier (Novelis)
- JLR sold the waste aluminium from vehicles back to the supplier (Novelis) rather than entering the general aluminum recycling system
- JLR ensured flexibility within the project which allowed new sub-innovations to be explored, potentially as separate projects
- JLR and Novelis looked beyond their own value adding processes and collaborated to capture wider value chain benefits.

Key success factors: What worked?

- Support from a third-party organisation – government, industry body, etc.
- Unwavering support and advocacy from senior stakeholders
- Fresh thinking and new ideas, nurtured by committed stakeholders.

Project impact

- Pioneering closed-loop aluminium recycling reclaims over 50,000 tonnes - the weight of 200,000 XE body shells -in one year
- REALCAR has helped Novelis reduce its greenhouse gas emissions by 13 per cent
- From August 2014 to July 2015, over 30,000 tonnes of press shop aluminium scrap were recovered into Jaguar Land Rover's UK closed-loop recycling
- Recycled aluminium requires up to 95 per cent less energy during production than primary material.

Challenges

- New material solutions can take considerable time to develop due to the level of complexity and challenge requiring technical innovation. The REALCAR project extended beyond its original three-year funding period with technical development taking around five years
- The purity and value of the scrap material must be protected from contamination by lower quality, lower value material, otherwise the commercial proposition may be compromised.

GOAL# 12 IMPACTS

- Environmental benefits
- Resource conservation

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Cost reduction
- Grow revenue



CASE STUDY 43

Driving Environmental Sustainability

Taj Hotels, Resorts and Palaces endeavours to reduce its environmental footprint. The Company focuses on increasing the sustainability of its hotel operations and optimising resource efficiency. A series of conscious steps were taken towards environmental responsibility. These steps involved waste minimisation, energy efficiency, water conservation and preservation of the ecosystems around their operations.

What did Taj Hotels do?

- Taj Hotels implemented responsible energy management practices aimed at reducing its direct and indirect emissions
- Increased use of renewable energy in the overall energy mix being used
- Conservation of water is done through rain water harvesting, recycling and reuse of water
- Ensured responsible waste management through composting of food and horticulture waste as well as ensuring responsible disposal of hazardous and e-waste
- To monitor and certify the environmental performance of its hotels, IHCL partnered with EarthCheck - a world renowned tourism and hospitality industry centric certification agency. Taj Hotels has been benchmarking and certifying their properties through EarthCheck since 2009.

Challenges

- Tourism has a significant environmental footprint which needs to be sustainably managed on the ground.

Project impact

Energy Management

- In FY2015-16, Taj Hotels was able to reduce 41,950,803 kg of CO₂ emissions.

Waste Management

- In FY2015-16, 73 hotels have enhanced their systems and now recycle /compost between 80 per cent to 100 per cent of their green waste.

Water Management

- In FY2015-16, 77 Taj Hotels recycled and reused a total of 22,75,775 KL of water.

GOAL# 12 IMPACTS

- Resource conservation (energy/ water/ waste management)
- Reduction of environmental footprint
- Optimisation of natural resources
- Responsible tourism

VALUE LEVERS FOR THE COMPANY

- Value addition to bottom line
- Brand Promise - Living up to Taj's brand promise of 'We Sincerely Care'
- Reducing dependency on natural resources

Key success factors: What worked?

- Leadership's personal involvement in setting environmental performance targets, monitoring and review
- Setting small but meaningful goals
- Internal sensitisation and awareness campaigns.



CASE STUDY 44

Including Sustainability Principles in New Product Development

Above and beyond meeting certification and legislative requirements, Tata Steel is seeking to improve the sustainability performance of its operations and products. There's a growing emphasis on being able to rely on a responsible supplier.

What did Tata Steel do?

In FY2014-15, Tata Steel launched 32 new products, including new product for food and paint packaging, new types of tube capable of withstanding extreme temperatures and new products for the car and construction markets.

The ones that stand out include:

- Protact* Packaging Steel: Fully approved and controlled food-safe product which is bisphenol A (BPA)-free. Using it for can making eliminates the need for lacquering-related operations and eliminates the emission of volatile organic components, reducing energy and water consumption. It also reduces

- costs for customers. Protact's polymer coating and steel substrate are infinitely recyclable
- Coretinium*: A unique composite solution that delivers weight savings to the transport sector. The results are: improved fuel economy, reduced CO₂ emissions and increased payload capability, all the while reducing costs for customers. It's all fully recycled at the end of its life, without the need to separate the core from the skins
- MagiZinc*: Auto delivers twice the level of corrosion protection offered by conventional zinc coatings, providing longer vehicle

GOAL# 12 IMPACTS

- Sustainable Production
- Innovation

VALUE LEVERS FOR THE COMPANY

- Ability to meet sustainability needs and compete in demanding market
- Brand image, being recognised as strategic partner to our customers
- Increase portfolio of added value / high margin products

lifetime and light weighting. It helps customers reduce component weight and cut down on raw material consumption. It delivers 30 per cent reduction in tool pollution and is a strong case for high yield production runs without failures, thereby, lowering total processing costs.



Project impact

- Helped lower greenhouse gas emissions over the full life cycle of steel products, for example, by offering fuel economy through light weighting via advanced high strength steels
- Improved the circularity of products, for example by reducing material use, extending service life, reusing, remanufacturing and recycling
- Developed partnerships along the entire value chain to help identify opportunities early in the innovation process
- Avoided the use of hazardous and potentially toxic chemicals
- Optimised resource efficiency and reduced waste in production by improving yields and minimising the amount of scrap produced in the processing of products
- Ensured responsible supply and increased the social value of products. This is about ensuring that materials and chemicals are manufactured in a responsible manner and that products provide value to society. This covers elements such as responsible sourcing, safety in the workplace and offering consumers an attractive visual appearance or added functionality
- Optimised total cost of ownership. Sustainability includes affordability, business viability and costs. We assess performance ratios as part of the sustainability assessments within new product development.

Key success factors: What worked?

Tata Steel developed one single process for New Product Development (NPD). It is fully integrated in marketing and sales processes, provides the overview to meet customers' needs and manage successful market implementation.

Challenges

Creating partnerships with customers and seeking their involvement in our product development processes, right at the start, such that our innovation is geared to deliver against their actual needs.



CASE STUDY 45

Promoting Sustainable Consumption through Societal Awareness

Tata Power started “Tata Power Club Enerji”, to propagate efficient usage of energy and to educate the society on climate change issues in 2007. Tata Power Club Enerji (TPCE) is an Energy and Resource Conservation Club that focuses on bringing about a first-hand realisation of the energy crisis and scarcity of natural resources in the country.

What did Tata Power do?

- TPCE started with a pilot programme of educating and sensitising 12 schools in Mumbai in 2007 and sensitised 6,000 students in 12 schools across the city
- In 2016, Club Enerji broadened the horizons and introduced various critical facets that will widen the scope of the existing module and make it expansive. This lead to deeper penetration in India and internationally.

Key success factors: What worked?

- The support from schools, college students, teachers, parents and other partners who share the same concerns on energy conservation
- TPCE provided the ground for youth to share and expand their understanding which brought about a chain reaction that significantly helped in conserving natural resources.

Project impact

- TPCE is present in more than 500 schools across India
- Saved around 3.06 million units and sensitised 3.5 million citizens in FY2015-16
- The programme has a total of 1,59,103 Energy Champions and 2,04,719 Energy Ambassadors
- TPCE has sensitised more than 12.8 million citizens and saved more than 17.26 million units in FY2015-16.

Challenges

- Enthusing youth and children to participate
- Educating people that energy, climate change and global warming are linked.



GOAL# 12 IMPACTS

- Education
- Resource conservation

VALUE LEVERS FOR THE COMPANY

- Building the brand

CASE STUDY 46

Reutilisation of Waste Concrete Water

Metals and Minerals Business Unit of Tata Projects is executing the Engineering, Procurement and Construction (EPC) of 1x4500 M3 Blast furnace complex at Nagarnar in Chhattisgarh. The 3.0 Million Tonnes Per Annum (MTPA) integrated steel plant has been commissioned by National Mineral Develop Corporation Limited (NMDC).

What did Tata Projects do?

At construction areas, drums of concrete trucks/transit mixers are cleaned by flushing water. A water vat is constructed near the water tank of the batching plant. The washed water from concrete truck chutes, hand mixers, and other equipment is then routed to pass through a system of weirs or filters to remove solids. A two-stage filtration process is adopted: the first stage collects the course aggregate and in the second stage grit gets settled and the water is passed to a tank for storage. The washed water is thus reused to wash down more chutes and equipment at construction sites or as an ingredient to cure concrete.

Key success factors: What worked?

- Support from the Project Manager and Facility Engineers to reuse water
- Involvement of Project Team.

Project impact

- Conservation of water
- Reduce soil contamination
- Better house keeping.

Challenges

Tata Projects is using approximately 2,000 lts of water per day to clean the transit mixers. This water that’s used in cleaning the mixer’s enclosure is either flushed at site or wasted when drained in an open space. This leads to littering and violation of environmental hygiene. Unused wet concrete, when dumped on bare grounds in construction sites, leads to ground water and surface water contamination. The challenge is to reuse this water to reduce contamination of soil.



GOAL# 12 IMPACTS

- Water conservation

VALUE LEVERS FOR THE COMPANY

- Conservation of water and improved processes
- Improved brand image

Amalgamated Plantations (APPL)

CASE STUDY 47

The Hathikuli Plantation:
Organic is the Future

Organic tea and pepper produced at Hathikuli, is free from chemicals, fertilizers, pesticides, toxic substances, and synthetic hormones. It is certified according to international standards for organic production and processing. These natural farming practices have encouraged newer species of birds, animals and insects to thrive in the region. Hathikuli is, thus, a testament to the commitment of the management towards safeguarding the rich bio-diversity of the region and a clarion call for other plantations in the area to adopt similar measures.

GOAL# 12 IMPACTS

- Reduced product impact
- Enhanced biodiversity

VALUE LEVERS FOR
THE COMPANY

- Environmental innovations
- New revenue streams



What did APPL do?

The company started the conversion process in 2007, where only 1/3rd of the tea estate was made organic. In 2010, 100 per cent of the garden was converted to Organic. During this period, the estate slowly discarded the use of all synthetic chemicals, fertilizers, weedicides and artificial manures. OneCert Asia is the Certifying agency which has certified Hathikuli Organic. The company also started Branding Hathikuli Tea under Hathikuli Organic and under this brand it sells CTC, Leaf Tea, Green tea and White tea.



Project impact

After the conversion process we have seen an increase in the biodiversity of Hathikuli but at the same time production has declined by 60 per cent. Due to non-availability of sufficient nutrients and pesticides, the tea bushes are becoming weaker every year and are more susceptible to pest attacks.



Challenges

Some of the challenges faced are:

- Controlling Helopeltis theovera and other pests
- Providing sufficient nutrients to the tea bushes
- Termite infestation which is further weakening the tea bushes
- Controlling of weeds manually is a big challenge in the absence of any organic weedicides, especially during the rainy seasons
- Price realisation of the tea is not compensating for the loss in crop.



Key success factors:
What worked?

- Better price realisation
- More emphasis on building the Hathikuli brand and pushing more teas through this brand
- Investment in marketing of Hathikuli brand.



Hathikuli is, thus, a testament to the commitment of the management towards safeguarding the rich bio-diversity of the region and a clarion call for other plantations in the area to adopt similar measures.

GOAL #13

GOAL #13

CLIMATE ACTION



Take urgent action to combat climate change and its impacts

Countries need to take urgent action to combat climate change and its impacts. Changing weather patterns, rising sea level, and more extreme weather events are disrupting national economies and affecting lives in a very severe way. It is important to look at affordable and scalable solutions to leapfrog to cleaner, more resilient economies.

WHY Goal #13 matters?

- 01.** Global emissions of carbon dioxide (CO₂) have increased by almost 50 per cent since 1990

02. From 1880 to 2012, average global temperature increased by 0.85°C
- 03.** Emissions grew more quickly between 2000 and 2010 than in each of the three previous decades

04. Oceans have warmed, the amounts of snow and ice have diminished and sea level has risen.

Climate change is caused by anthropogenic emissions of CO₂ and other greenhouse gasses

Climate change impacts natural and human systems globally

- 01. Global Commitment**
Agreement by 195 nations at COP21 to keep global temperature rise below 2°C

02. Impact of Collaboration
35 per cent reduction in carbon emissions from 1990 levels through collective efforts.

BUSINESS & Goal #13: What's the Connect?

To achieve the UNFCCC goal of limiting global temperature rise to well below 2°C above pre-industrial levels, the world must transform its systems linked to...

Energy	Industry	Transport	Food	Agriculture	Forest
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This will ensure that cumulative net emissions do not exceed one trillion tonnes of cumulative carbon

Simultaneously the world needs to anticipate, adapt and become resilient to the current and expected future impacts of climate change.

Companies need to look at

decarbonising their operations and supply chains

reducing the carbon footprint of their products, services and processes

setting ambitious emissions reductions targets in line with climate science

scaling up investment in the development of innovative low-carbon products and services

Companies should also build resilience in their operations, supply chains and the communities in which they operate.

TARGETS under Goal #13

- 01.** Strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries

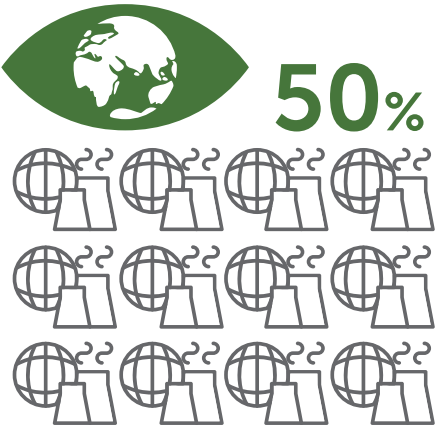
02. Integrate climate change measures into national policies, strategies and planning

03. Improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning

04. Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate

Change to a goal of mobilising jointly USD 100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalise the Green Climate Fund through its capitalisation as soon as possible

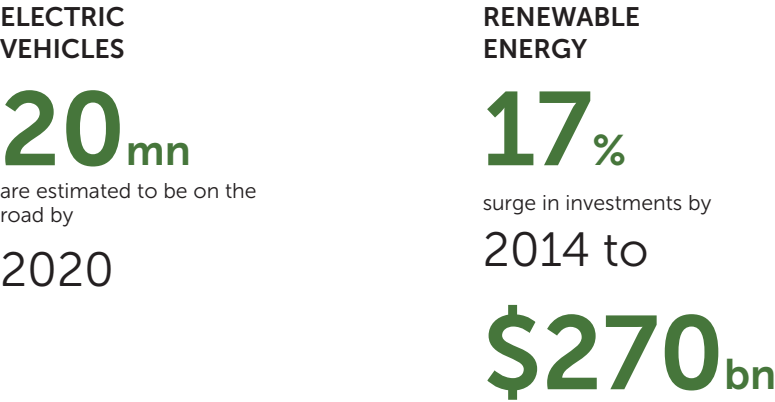
05. Promote mechanisms for raising capacities for effective climate change-related planning and management, in LDCs, including focusing on women, youth, local and marginalised communities.



Increase in global emissions of carbon dioxide (CO₂) since 1990.

OPPORTUNITY for Business

Accelerated climate action presents an opportunity for clean energy solutions.



Businesses must focus on and invest in developing clean and efficient energy solutions in partnership with cross-industry players

How can business CONTRIBUTE to Goal #13?*

01. Source all electricity the company consumes at its facilities from renewable sources – such as wind, solar or hydro – or install renewable energy generation capacity on-site

02. Retrofit the lighting systems of the company’s facilities to energy efficient LED lighting

03. Increase investment in innovation to improve the efficiency of the company’s product portfolio, thereby enabling customers to reduce their GHG emissions
04. Understand climate risk and build resilience into the company’s assets and supply chain

05. Invest in CCS (carbon capture and storage) technology to capture emissions produced from the use of fossil fuels in electricity generation and industrial processes, preventing the carbon dioxide from entering the atmosphere
06. Reduce GHG emission from transport operations with abatement levers such as reducing the carbon footprint through greater fuel efficiency, local sourcing, modal shift to lower carbon modalities (e.g. air to sea freight), modular transport, improving container utilisation, warehouse optimisation, etc

07. Expand sustainable forest management through responsible sourcing practices and product substitution.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

TCS

CASE STUDY 48

Leading the Low Carbon Growth

TCS has set the target to reduce its specific carbon footprint (Scope 1 + Scope 2 - per capita) by 50 per cent over the baseline year of 2007-08 by 2020. Till March 2016, TCS has avoided over 1.3 million tonnes of Carbon Dioxide Equivalent since the baseline year, with the help of the various carbon mitigation initiatives. The strategy is to decouple the business growth and the increase in the carbon footprint so as to grow sustainably. To achieve this target, TCS has identified a detailed plan of action on Energy and Carbon Management, focusing on the following elements – Green Building Office Infrastructure, Green IT, Operational Energy Efficiency and Procurement of Renewable Energy.

GOAL#13 IMPACTS

- Emission reduction
- Quality of life

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Reducing risk



What did TCS do?

- Green Buildings - energy efficiency by design and energy efficient equipment
- Green IT - Server virtualisation, Server consolidation, Cooling optimisation and Green procurement
- Efficient operations – Operational efficiency, Remote Energy Monitoring and Control
- Renewable Energy - Onsite RE installations, solar PV and solar thermal, Procurement of RE from third party.



Project impact

- 43.6 per cent reduction in specific carbon footprint over 2007-08 baseline
- 45 per cent reduction in specific electricity consumption over 2007-08 baseline
- 10 LEED certified campuses
- 3.14 per cent of total power from renewable sources
- 50 per cent reduction in business air travel emissions.



Challenges

- The changes in technologies required to get to a low carbon path
- The cost burden to retain or achieve the carbon emission at a desired level.



Key success factors: What worked?

- Regular monitoring, measuring and reporting of data
- Eco-transformation at every level in the company - supply chain, business process, and infrastructure and engaging with stakeholders.



CASE STUDY 49

Taking Urgent Action to Combat Climate Change and its Impact

Tata Motors has signed a contract to supply 25 units of the Tata Starbus Diesel Series Hybrid Electric Bus, with full low floor configuration, to the Mumbai Metropolitan Region Development Authority (MMRDA) – the single largest order awarded for Hybrid Electric Vehicle Technology.

What did Tata Motors do?

Tata Motors has developed the Diesel Hybrid Bus and received an order to deliver 25 Diesel Series Hybrid Buses to Mumbai. They are to be operated in Bandra-Kurla Complex as well as for routes connecting BKC to the Airport.

Project impact

Use phase of an automobile contributes to around 75 per cent carbon emissions and Diesel Hybrid Bus is expected to save ~25 per cent diesel, with a corresponding reduction in CO₂ emissions.



CASE STUDY 50

The Arrival of Zero Pollution Transportation

In India, Tata Motors has always led the drive for the use of cleaner fuels for public transportation. Way back in 1999, the company introduced CNG buses, followed by the revolutionary CNG Electric Hybrid buses in 2010. And now, in 2012, it has taken the lead to introduce the latest fuel cell technology with the new Starbus Fuel Cell bus.

What did Tata Motors do?

Tata Motors is developing a fleet of fuel cell buses, based on the hybrid platform series which can provide clean public transportation in cities where hydrogen infrastructure will be available.

Project impact

Fuel cell buses will completely eliminate the use of fossil fuel and associated exhaust emissions and carbon emissions.

Key success factors: What worked?

Tata Motors ability to innovate and build environment friendly products.

Challenges

Development of advanced alternate fuel technology and infrastructure that is required for supply of hydrogen, to be able to operate the fuel cell bus fleet.



GOAL# 13 IMPACTS

- Developed fuel cell bus which will have zero emissions on road

VALUE LEVERS FOR THE COMPANY

- Innovative advanced vehicle development capabilities

Tata Steel

CASE STUDY 51

Hlsarna – Looking to the Future

The primary steel making plant at IJmuiden is one of the most CO₂ efficient steelworks in the world, according to a recent World Steel Association benchmark. Since 1989, the amount of energy used to produce a tonne of steel at the IJmuiden site has been reduced by 31 per cent.

However, while Tata Steel continues to improve the efficiency of its processes and operations, there are thermodynamic limitations to reducing CO₂ emissions on a large scale. In a conventional blast furnace, the production of steel from iron ore is determined by the chemical reaction, which uses carbon as reducing agent. There comes a point where the laws of physics prevent further major improvement of CO₂ efficiency for the blast furnace technology.

 What did Tata Steel do?

Tata Steel has recognised the need for investing in ground breaking technology to deliver a step change in CO₂ efficiency in steel making. Tata Steel is playing a leading role in ULCOS, a Europe-wide initiative to reduce carbon emissions in steel making. In 2010, a €20m Hlsarna pilot plant was built at IJmuiden.

The furnace simplifies the blast furnace process dramatically, because it can handle fine raw materials directly without the need for agglomeration (collection into a cluster or mass).



 Project impact

- In 2010, a €20m Hlsarna pilot plant was built at IJmuiden. Hlsarna's revolutionary cyclone converter-based ironmaking process directly converts iron ore and coal into iron, without any pre-treatment of the ore and coal
- Since 2010, several test campaigns have been performed that have proven the potential of this technology. The environmental and financial rewards are achievable
- Compared to a blast furnace, its energy-efficient process route can reduce CO₂ emissions by 20 per cent. Used in combination with carbon capture and storage

GOAL# 13 IMPACTS

- Reduced CO₂ emissions
- Innovation

VALUE LEVERS FOR THE COMPANY

- Licence to operate
- Ensure the market for steel
- Preferred supplier of responsible steel

- techniques, it should be possible to achieve CO₂ reductions of up to 80 per cent. It can also use more economically priced raw materials
- The ULCOS project is currently in its second phase. This aims to demonstrate its feasibility under large-scale, industrial production conditions. During this phase, Tata Steel will also assess the opportunity to use this technology to recover zinc from zinc coated steel scrap
 - This technology will contribute enormously to the creation of a low carbon, circular economy and could potentially be rolled out some 15 to 20 years from now.

 Challenges

The technology is ground breaking. Maintaining a stable cyclone whilst continuously injecting new raw material in the converter has proven to be one of the greatest challenges for this project.

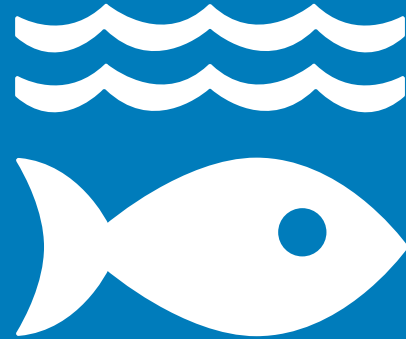
 Key success factors: What worked?

- The partnership approach - Pooling of resources and knowlege helped strengthen the process and make it result oriented
- The right combinations of skills aided progress and helped deliver promises
- Out-of-the-box thinking and perseverance are key ingredients to deliver success.



GOAL #14

GOAL #14



LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Conserve and sustainably use the oceans, seas and marine resources. The world’s oceans, their temperature, chemistry, currents and life – drive global systems that make the Earth habitable for humankind. This essential resources needs to be managed carefully for a sustainable future.

- 06.** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognising that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation

07. By 2030, increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
- 08.** Increase scientific knowledge, develop research capacities and transfer marine technology taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs

09. Provide access of small-scale artisanal fishers to marine resources and markets
- 10.** Ensure the full implementation of international law, as reflected in UNCLOS for states parties to it, including, where applicable, existing regional and international regimes for the conservation and sustainable use of oceans and their resources by their parties.
- SIDs** - Small Island Developing States

LDCs - Least Developed Countries

UNCLOS - The United Nations Convention on the Law of the Sea

WHY Goal #14 matters?

- 01. Major source of food**
3 bn people depend on fish as a source of protein

02. Risk of Depletion
100 per cent potential for stock of all fished species to collapse by 2048

03. Sustainable Fishing
Eco-labeled fishery product increased 147 per cent between 2010 and 2014.

TARGETS under Goal #14

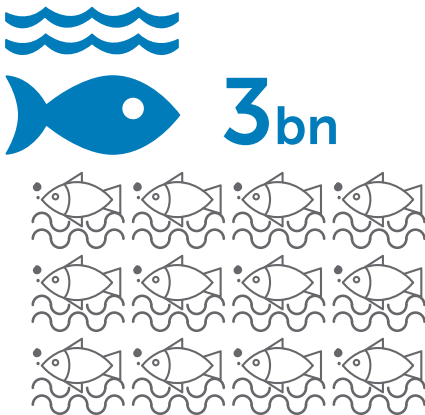
- 01.** By 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution

02. By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans

03. Minimise and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 04.** By 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

05. By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information

MAJOR SOURCE OF FOOD



People depend on fish as a source of protein.

The world’s oceans drive global systems that make the Earth habitable for humankind. Our critical resources necessary for sustaining life are all ultimately provided and regulated by the sea.



“Can we ensure careful management of this essential global resource for our sustainable future?”

Source: <http://www.globalgoals.org/global-goals/life-below-water/>

BUSINESS & Goal #14: What's the Connect?

Oceans face the following threats which are caused primarily by human actions.

Marine and nutrient pollution

Resource depletion

Climate change

These threats

- Place further pressure on environmental systems like biodiversity and natural infrastructure.
- Create global socio-economic problems, including health, safety and financial risks.



In order to promote ocean sustainability, world leaders and businesses must:

a) Provide innovative solutions that prevent and mitigate detrimental impacts to marine and coastal environments.

b) Work to protect marine and coastal species.

c) Support the people who depend on oceans (marine and coastal economies), whether it be for employment, resources, or leisure.

OPPORTUNITY for Business

Depletion of ecosystems has created attractive business opportunities for sustainable fishing.

MARKET SIZE

Eco-labeled seafood currently is a

\$4.8_{bn}

retail market

PROFITABILITY

Potential for fishing sector to boost profits by

\$51_{bn}

with sustainable fishery policies within 10 years

Businesses may need to develop transparent and traceable supply chains as well as a sustainable sourcing infrastructure.

How can business CONTRIBUTE to Goal #14?*

- 01.** Track the life cycle of products and materials in order to understand how they are disposed and which products could likely find their way into marine environments

02. Record and disclose information on the chemical and material usage within products, packaging, and processing systems to facilitate closing the loop

03. Improve resource efficiency by altering the design, manufacture, or use of products and packaging to reduce the amount of waste that could potentially enter the environment

04. Improve resource efficiency by generating value from waste. Contribute to the development of
- waste management technologies that minimise the use of clean water

05. Replace, limit or prohibit the use of certain chemicals, additives, or materials that could prevent closing the loop or lead to nutrient pollution or chemical and physical hazards if they happen to reach marine ecosystems

06. Prevent waste mismanagement or littering that could pollute the marine environment. Implement safeguards and strategies to manage/ mitigate the impacts of marine disasters

07. Raise consumer awareness on effective ways to properly dispose of their waste to discourage littering and promote responsible behavior
- 08.** Prohibit practices that put marine species and resources at further risk of harm, exploitation or depletion

09. Directly and indirectly support coastal economies and coastal livelihoods through marine-related industries and other interventions

10. Utilise a value-chain approach to create connections between the design, packaging, marketing and recycling of materials with the goals of reducing their environmental impact at the end of their lifecycle.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

CASE STUDY 52

Saving the Gentle Giants

The ‘Save the Whale Shark’ campaign was launched, partnered by Tata Chemicals, Gujarat Heavy Chemicals, Wildlife Trust of India (WTI), the Coast Guard, the Indian Navy, the Ministry of Environment and Reef watch. The Whale Sharks are the gentlest, and the largest, fish in the world. They swim from seas off the shores of Australia to the coast of Saurashtra, Gujarat, between September and May, to spawn in these waters. About 1,200 Whale Sharks had been killed by fishermen annually before the Indian Government banned the fishing and trading of this fish in 2001.

What did Tata Chemicals do?

- Street plays were conceptualised to spread awareness and build sensitivity among the fishing community. The story touched popular sentiment because it carried forth the message of the immensely popular spiritual leader, Morari Babu who formally launched the campaign in Gujarat as an ambassador for the whale shark.
- The first street play for community awareness was held on the Tata Chemicals Mithapur premises. The performers travelled along the coast of Gujarat and staged 16 performances in 12 towns. The group carried the play through major fishing harbours and ports, such as Beyt Dwarka, Somnath, Veraval and Okha
- The second phase of this campaign also took off at Tata Chemicals Mithapur with a 40 ft inflatable model of the whale shark in the background. The street plays were conducted at various places along the coast of Gujarat

Project impact

- Community awareness on the importance of Whale Sharks
- Joint participation by Government bodies, NGOs and local industries
- Creation of Whale Shark watching areas
- Conservation and prevention of poaching of the Whale Sharks
- Increased seriousness and acceptance of the “Save the Whale Shark” campaign
- Additional income for locals from tourism.

Challenges

- Difficulty in convincing the local fishermen to stop illegal poaching of the Whale Shark, as it used to fetch them good money in the export market
- Creating an alternative source of income for the local fishermen.

GOAL# 14 IMPACTS

- Halting loss of biodiversity
- Reducing poaching and trafficking
- Community awareness

VALUE LEVERS FOR THE COMPANY

- Environmental protection
- Community participation
- Government and NGO partnership



Key success factors: What worked?

- Introducing the immensely popular spiritual leader, Morari Babu who formally launched the campaign in Gujarat as an ambassador for the whale shark, to strike a chord with locals
- Joint participation of local industries, NGOs and Government bodies
- Creation of whale watch areas helped creating additional income sources for communities.

CASE STUDY 53

Protecting the Endangered Marine Turtles

TCS and Sahyadri Nisarga Mitra implemented the Marine Turtle Conservation Programme to protect the breeding sites of globally endangered species of marine Olive Ridley Turtles. The programme was run on a participatory basis, from FY2010-11 to FY2014-15. Conservation activities include protecting turtles arriving for breeding, building protection nests, constructing hatcheries, and releasing hatchlings into their natural habitat.

What did TCS do?

- TCS-Environmental Sustainability, Health and Safety team organised the Marine Turtle Conservation Programme on a participatory basis with the NGO
- The company facilitated the Turtle Festival which marks the release of hatchlings into their natural habitat. These attracted a large number of nature lovers at Velas, Maharashtra, and promoted the Village Based Tourism programme
- TCS involved local community members as well as TCS associates to drive the programme.

Key success factors: What worked?

- Apart from arresting the rate of loss of biodiversity, it has also helped uplift communities in the area
- Strong participation from local community members strengthened the initiatives.

Project impact

- A total of 134 turtles nests as well as breeding population of endangered (female) Olive Ridley Turtles were protected between FY2010-11 and FY2014-15
- A total of 14,329 eggs were translocated to a hatchery between FY2010-11 and FY2014-15
- Total of 7,378 hatchlings were successfully released into their natural habitat during breeding period between FY2010-11 and FY2014-15
- The survival rate of 58.95 per cent was achieved in FY2014-15
- The Turtle Festival attracted a large number of nature lovers at Velas benefitting 35 families under the Village Based Tourism Programme
- The programme has been extended to six villages - Anjarle, Harihareswar, Kelshi, Maral, Shekhadi and Velas in Maharashtra.

Challenges

- Creating awareness among associates about the importance of biodiversity conservation.



GOAL# 14 IMPACTS

- Ecosystem conservation
- Employment
- Community upliftment

VALUE LEVERS FOR THE COMPANY

- Building the brand
- Building partnership
- Employee engagement

CASE STUDY 54

Saving the Mighty Mahseer

Tata Power was approached by the state fisheries department in the late 1960s to help save the endangered Mahseer fish. As a part of Tata Power’s eco-restoration and eco-development programme, conservation of this species was undertaken in 1975. The conservation was facilitated through ecological improvement of the lakes, for food and sport, for breeding, conservation and rehabilitation of the endangered fish. The success with the Deccan and the Golden Mahseer initiative, over the past 40 years, has given a fresh boost of life to the fish, while also promoting biodiversity conservation and eco-tourism.

What did Tata Power do?

- A state-of-the-art hatchery for Mahseer has been developed at Walwhan, Lonavla which has the capacity to hatch over five lakh eggs at a time. The Company has also carried out cage culture and ranching programmes successfully and demonstrated the use of such research programmes, for replication, all over the country
- In FY2015-16, the company launched the ‘Act for Mahseer’ campaign, a sustainable programme focused at conservation of the Mahseer fish. The campaign was a call-to-action public campaign aimed at spreading awareness about the mighty Mahseer and aimed to help preserve this valuable fish species in a big way at a national level. The programme has been launched with a three-pronged approach to educate, engage and empower Mahseer lovers. Under each approach, various activities are undertaken.



GOAL# 14 IMPACTS

- Sustained for past 40 years, this is the biggest conservation project carried out by a corporate company
- Care for environment and the community at large.
- Addressing global issues
- Paying back to society
- Its a conservation programme that goes beyond business

VALUE LEVERS FOR THE COMPANY

- Beyond business
- Beyond boundaries
- Added brand value to Tata group
- Mr. Ratan N Tata was awarded the Doctorate of Science by the Central Institute of Fisheries Education

Project impact

- In the last 40 years, over 13 million fertilized eggs have been obtained and over seven million fingerlings of Mahseer have been produced for stocking water bodies all over India, and internationally (FY2015-16)
- Around 300 fishery scientists have also been trained to date, to continue conservation efforts (FY2015-16)
- Tata Power’s conservation programme has, till date, produced more than 10 million Mahseer seeds and distributed them all over India (FY2016-17)
- The release of fishes in various water bodies has always been carried out in association, knowledge, guidance and involvement of respective state fisheries departments in India.

Challenges

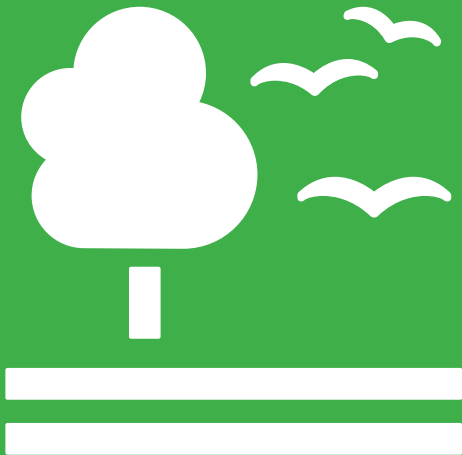
Getting authentic information on various Mahseer species in India, Proper morphological and taxonomical studies for identification of the correct species, Information on original habitats, population density status in the wild, Protecting breeding habitats from getting polluted, and Awareness among fishermen and the public, at large, were the major challenges.

Key success factors: What worked?

- Commitment and keen interest from Tata Power’s top management towards conservation of the endangered species
- Provision of financial assistance for sustainable development
- Proper infrastructure, trained and skilled ground level workers, qualified, dedicated and passionate officers and company volunteers helped in project execution
- Correct knowledge on Mahseer breeding processes, willingness to learn, improve and share knowledge, media publicity from corporate communication for creating awareness, and reaching beyond boundaries, among others contribute towards key success factors.



GOAL #15



LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Deforestation and desertification caused by human activities have resulted in climate change. These pose major challenges to sustainable development. Hence efforts are needed to grow and manage the forests.

of flora and fauna, and address both demand and supply of illegal wildlife products

- 08. By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species
- 09. By 2020, integrate ecosystems and biodiversity values into national

and local planning, development processes and poverty reduction strategies, and accounts

- 10. Mobilise and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems
- 11. Mobilise significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to

developing countries to advance sustainable forest management, including for conservation and reforestation

- 12. Enhance global support to efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

WHY Goal #15 matters?

- 01. **Stressed ecosystems**
"At risk" species face extinction at 1,000 times the natural rate
- 02. **Increased demand**
13 million hectares of forest was lost worldwide between 2000 and 2010 to meet global growth demand
- 03. **Forest management**
Planted forest areas covers only 7 per cent of the world's total forest area.

- 01. By 2025, 1.8 billion people will be living in countries or regions with absolute water scarcity
- 02. 60 per cent of the world's ecosystem services have been degraded over the past 50 years; with deforestation solely eliminating about 2-5 trillion USD of ecosystem services

- 03. Due to drought and desertification each year, about 12 million hectares are of land is lost, a potential of growing 20 million tons of grains.

Can we take urgent and significant actions to halt the losses, conserve and sustainably use biodiversity and ecosystems?

TARGETS under Goal #15

- 01. By 2020, ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- 02. By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation globally
- 03. By 2020, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world
- 04. By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development
- 05. Take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species
- 06. Ensure fair and equitable sharing of the benefits arising from the utilisation of genetic resources, and promote appropriate access to genetic resources
- 07. Take urgent action to end poaching and trafficking of protected species

FOREST MANAGEMENT



Percentage of forest area covered.

BUSINESS & Goal #15: What's the Connect?

To retain the integrity and vitality of natural resources today and for future generations and to ensure long-term socio-economic growth and prosperity, sustainable management of land is key.

Business can directly contribute to this SDG by measuring, managing and mitigating its impact and dependence on land and ecosystems.

Companies affect ecosystems because they rely on the provisioning services (e.g. freshwater, fiber, food) and regulatory services (e.g. climate regulation, flood control, water purification) ecosystems provide.

Companies can implement strategies to incentivise sustainable land use, responsible forest management and environmental stewardship.

Companies will have to increase efforts to restore degraded land, to secure supply of natural resources and raw material to meet the future requirements.

Companies play an integral part in preserving and restoring vital ecosystems, promoting the sustainable use of land and forests, by scaling up research and development in innovation, investing in natural infrastructure and implementing responsible sourcing policies.

BUSINESS & Goal #15: What's the Connect?

Beyond conservation, business can influence many other dimensions of natural ecosystems...

Combat poaching and trafficking	Eliminate invasive species	Environmental planning	Share genetic resources	Land remediation	Pursue certification	Promote sustainable products	Invest in natural ecosystems
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While many of the effects of disruption in natural ecosystems are felt locally first, the long-term consequences are global and the scale is highly relevant to business, presenting risks and opportunities.

OPPORTUNITY for Business

Forest management presents new product and market opportunities

15% to 25% \$23.9bn

Certified wood products globally carry a price premium Global market value of Second-generation biofuels

Companies will have to use innovation to minimise waste and maximise resource efficiency and reuse.

Businesses need to develop capabilities for maximising output and recovering value from used products through cross-sector partnerships

How can business CONTRIBUTE to Goal #15?*

01. Measure, manage and mitigate impacts on ecosystems and natural resources

02. Finance the restoration of degraded land for production and/or conservation purposes

03. Invest in natural infrastructure as a cost-competitive alternative to grey infrastructure

04. Scale up best practices for land use planning and management
05. Support and apply landscape approaches, based on multi-stakeholder dialogue and collaborative action, to overcome social and environmental fracture lines in landscapes facing deforestation, land and ecosystem degradation

06. Foster product and technology innovation to optimise resource efficiency, reduce impacts on ecosystems and lower carbon emissions
07. Commit to and implement responsible sourcing practices beyond compliance - applying environmental and social safeguards - for all raw materials and commodities

08. Scale up industrial reuse of water and support watershed protection programs

09. Expand markets for responsible forest products and thereby support sustainable forest management.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

Tata Chemicals

CASE STUDY 55

Integrated Approach to Water Management at Mithapur

Tata Chemicals through the Tata Chemicals Society for Rural Development (TCSRd) has been implementing various water conservation and management projects around its plant in Mithapur region. Mithapur is one of the most drought prone regions of the country with an average of 10-12 inches of annual rainfall. The area's biggest concern is the non-availability of quality water. The Mithapur complex has eliminated dependence on ground water since April 2007. It has adopted various in-house water conservation measures, management of the rain-fed lakes and using innovative Seawater Desalination Technologies.

What did Tata Chemicals do?

- Tata Chemicals revamped the entire technology of water usage by conserving fresh water, and by substituting fresh water with seawater. Reusing the same water for different purposes helped significantly reduce dependency on fresh water resources
 - A Make-up Water (MUW) plant was set up where condensate was a product and salt was considered as a by-product. This unique MUW plant generates 4.5 KL of condensate per
- ton of salt, thus generating on an average 20 lakh KL of water from this plant
 - TCSRd's water management and conservation projects provide water for agriculture, animal husbandry, drinking and household use. These include:
 - Water harvesting project – village ponds, bunds, check dams and so on
 - For replenishing the aquifers project – well recharge,
- percolation tanks and many more new technologies are used
 - Drinking water project - establish community managed systems, distribution infrastructure, well renovation, reverse osmosis plant, roof rain water harvesting etc
 - Salinity Ingress mitigation project - creating subsurface *bandharas* etc
 - Water conservation – micro irrigation, crop diversification and so on.



GOAL#15 IMPACTS

- Watershed protection

VALUE LEVERS FOR THE COMPANY

- Social license to operate
- Community participation
- Government and NGO partnership

 Project impact

- Key initiatives were implemented to reduce dependency on fresh water external sources, from 185 lakh gallons/day to 5 lakh gallons/day
- Tata Chemicals has managed to reduce its blue water footprint by 60 per cent in the last three years
- Formation of VLO (Village Level Organisation) - Total 40 VLO are working as executive body at village level
- The drinking water distribution infrastructure was completed in 15 villages, covering 2,775 households in FY2015-16 and 13,523 till date
- Water conservation - 237 MCFT capacities were created, benefiting 27 villages, resulting in 6,420 acre of land covered under irrigation and agriculture. The intervention, thus, improved production by 40 per cent. The direct economic gain per year is approximately ₹ 240-270 lakh
- Use of Micro irrigation system has helped farmers increase net sown area from 1 acre to 3 acres and 1 acre to 5 acres through sprinkler and drip irrigation respectively. Till date 3,500 acre of land has been covered.



 Challenges

Mithapur plant, located in Okhamandal region, perpetually suffers from fresh water scarcity. It was critical to involve communities in the implementation of projects and reduce dependence of fresh water sources as much as possible. The community support was mobilised through awareness building activities.

 Key success factors: What worked?

- Leveraging existing government schemes
- Community ownership of projects through creation of village-level organisations.

Tata Global Beverages

CASE STUDY 56

Sustainable Beverages

Tata Global Beverages (TGB) has had an active agenda on the sustainable sourcing of raw teas for many years. TGB’s aim is to ensure that we source our teas from producers who meet good social and environmental standards, from across the world. They began working with Ethical Tea Partnership (ETP), as one of the founding members in 1997, to help achieve this. TGB is committed to sourcing 100 per cent from Rainforest Alliance Certified™ farms for all their Tetley-branded teas in the Europe, Middle East and Africa (EMEA) and Canada, America and Australia regions by 2016. They are on-track to achieve this, with inclusion rates of 50 per cent or more certified content in many blends. They are also the founding members of the Trustea initiative in India, a multi-stakeholder initiative led by the Tea Board of India, to sustainably transform the Indian tea industry.

 What did Tata Global Beverages do?

- Tata Global Beverages recently announced the Sustainable Plant Protection Formulation (SPPF) project, an initiative to develop ecological solutions for plant protection in tea
- The project is an initiative between three Tata Companies — Tata Chemicals, Tata Global Beverages and Rallis — to develop and use ecological solutions for plant protection in tea
- The objective of the project is to develop commercially viable portfolio of SPPFs for tea; and will strive to find ecologically-friendly solutions to pest management in Indian tea gardens.



GOAL#15 IMPACTS

- Sustainable forest management
- Reduce product impact
- Optimise resource efficiency

VALUE LEVERS FOR THE COMPANY

- Environmental innovation
- New revenue streams
- Decarbonise product value chain

 Project impact

- Integrated pest management
- Independent third party certifications
- Farmer Field Schools
- Promotes the integration of non-chemical ways, such as cultural, biological, physical and mechanical, along with chemical control measures, against various pests of tea
- Evidence from tea producers that the tea they supply to TGB is sustainably sourced
- Educates the farmers on sustainable agricultural practices and certifications, and encourages them to follow IPM and reduce usage of pesticides.

 Challenges

- Convincing the farmers about implementing good modern agricultural practices
- Targeting and positively impacting small tea farmers.

 Key success factors: What worked?

- Through Farmer Field Schools (FFS), which enable farmers to choose their own curriculum and learn through practice on demonstration plots, TGB was able to convince them. Further, the company also used a Lead Farmer model, based on a 'train-the-trainer' approach, whereby training was provided to a group of identified lead farmers, who then go on further to train a smaller group of farmers
- Tata Global Beverages is one of the founding members of the Trustea initiative in India, a multi-stakeholder initiative led by the Tea Board of India, to sustainably transform the Indian tea industry. The 5-year programme targets 500 million kg of tea from 600+ factories, and hopes to have a positive impact on the livelihoods of 5,00,000 tea plantation workers and 40,000 smallholders by 2017.



TCS

CASE STUDY 57

Conservation and Enhancement of Butterflies through Creation of Butterfly Zones

In order to protect and enhance the rapidly declining butterfly population in urban areas, TCS took up the Butterfly conservation programme. Under this programme, butterfly zones are created by planting flowering shrubs which act as an important component of landscaping. These butterfly zones are created by planting native host plant species.

 What did TCS do?

- In depth study of landscape (Biodiversity mapping and taxonomic variation in flora) was conducted
- Selection of appropriate plot and host plant species for the butterfly zone
- Extensive studies of butterflies during breeding period for taxonomic classification of species
- Maintenance of Butterfly zones.

 Project impact

- Butterfly zones have been developed across 15 TCS locations
- A total of 58 species of butterflies are found in these 15 locations
- Improved ecosystem
- Creation of Butterfly zones is found to be an important attraction for associates, visitors and clients. It has resulted in improving TCS premises through colorful flowering shrubs and butterflies.



 Challenges

- Landscape study
- Taxonomical study
- Selection of plant species

 Key success factors: What worked?

- Creation of Butterfly zones with flowering shrubs and herbs, serving as feeding and breeding sites for butterflies, has resulted in remarkable increase in butterfly species diversity
- Butterfly zones have become an important part of TCS' landscape ecosystems
- Enhanced aesthetics and recreation value has become key attraction factors for clients and visitors.

GOAL# 15 IMPACTS

- Ecosystem conservation

VALUE LEVERS FOR THE COMPANY

- Building the brand

CASE STUDY 58

Saving the Sage-Grouse

The greater Sage-Grouse is a large game bird native to the western United States. It is one of the few species that depends on Sagebrush that provides year-round shelter and food. Over the last 50 years, the populations and breeding habitat have declined leading to concerns about the bird’s future.

What did Tata Chemicals do?

Tata Chemicals North America has been an integral part of this conservation effort in southwest Wyoming. It has worked through habitat conservation agreements with the U.S. Bureau of Land Management and Fish and Wildlife Service. These conservation agreements establish Tata’s commitment to go above and beyond to serve society through science and conserve critical sage-grouse habitat over the next 30 years. Tata is one of the founding members of the Wyoming Mining Natural Resource Foundation. It is a public benefit corporation organised to support an economically viable and sustainable Wyoming mining industry. Through creation, management, and administration of voluntary national stewardship strategies, initiatives, and agreements, it supports issues that affect Wyoming’s communities and natural resources.

Challenges

Tata Chemicals’ processing facility is located inside and adjacent to habitat for Sage-Grouse. Tata engineered and built a new ventilation shaft in core habitat without, affecting the Sage-Grouse using cutting edge ventilation and mining technology.

Project impact

The Fish and Wildlife Service has determined that protection for the greater Sage-Grouse under the Endangered Species Act is no longer warranted and is withdrawing the species from the candidate species list.



- GOAL# 15 IMPACTS**
- Habitat preservation and species protection

- VALUE LEVERS FOR THE COMPANY**
- Social licence to operate

Key success factors: What worked?

Tata partnered with other companies in a collaborative approach to help create the Wyoming Mining Natural Resource Foundation. It supports the sustainability efforts of the mining community. This collaborative approach along with the innovative engineering solutions, at the Tata plant, to build out the new shaft with reduced noise levels supported protection of the habitat.

CASE STUDY 59

Maintaining Environmental Sustainability

Environmental conservation is a key aspect of the Tata group’s tradition of giving back to society. Taking a lead from this philosophy, the Tata International team set down a detailed plan to shrink its environmental footprint.

What did Tata International do?

- It was 1975 when Tata International began setting up its operations at Dewas (Madhya Pradesh, India). The scene that greeted the team was a plot of barren land with a single tree standing its ground
- As the Dewas leather plant’s operations grew, so did the purview of its green initiatives, spreading not just across the facility’s premises but to the neighbouring rural areas as well
- Tata International encourages tree plantation, biodiversity conservation and effluent treatment. A special effort is also made to conserve the biodiversity.

Key success factors: What worked?

Tata International has made significant strides in its green endeavours and plans are already underway to take the message even further, supported by a team of passionate volunteers.

Challenges

- Containing environmental impact
- Lack of awareness on the importance of tree plantation and biodiversity conservation.

Project impact

- Over 150,000 trees have been planted, as part of the company’s steady effort over the years. 40 years later, the scene that greets visitors is a lush campus enveloped in green cover
- Also, each month, a tree plantation drive is taken up to promote the message of ‘green living’ among employees and locals. The CSR team identifies locations at nearby villages – such as government schools, police stations, hospitals – where the drives can be held. So far, 4,021 plants have been planted at various locations
- Natural surroundings are preserved so as to not disturb the habitat of hares, foxes, peacocks and various migratory birds indigenous to the area. Snakes are caught and handed over to the forest department and locals are made aware of how to deal with wildlife that may stray into human-inhabited areas.



- GOAL#15 IMPACTS**
- Reforestation efforts.
 - Efficient use of natural resources.

- VALUE LEVERS FOR THE COMPANY**
- Tata International is a signatory to the UN Global Compact. This is part of our reforestation efforts to contain environmental impact.

GOAL #16



PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Promote just, peaceful and inclusive societies. This goal is dedicated to the promotion of peaceful and inclusive societies for sustainable development. Countries need to ensure access to justice for all, and build effective, accountable institutions at all levels.

10. Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

11. Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime

12. Promote and enforce non-discriminatory laws and policies for sustainable development.

WHY Goal #16 matters?

01. Armed conflicts - The number of fatalities due to conflicts increased by a factor of 3.2 between 2008 and 2014

02. Displacement - 59.5 million people have been forcibly displaced due to various conflicts in 2014

03. Bribery, Corruption - Among the institutions most affected by corruption are the judiciary and police

04. The rate of children leaving primary school in conflict affected countries reached 50 per cent in 2011, accounting to 28.5 million children

05. Corruption, bribery, theft and tax evasion cost some US \$1.26 trillion for developing countries per year

06. Varied forms of violence, a complex multi-dimensional set of drivers and an increasing number of non-state actors using new technologies and social media and with transnational connections, are changing the nature of violent conflicts.

BUSINESS & Goal #16: What's the Connect?

Whilst the world, in general, has become more prosperous and more peaceful in recent decades; inequalities are growing in many countries and there remains significant pockets of extreme poverty, violence, exclusion and discrimination.

A responsible business through its core business, strategic social investment, public policy engagement and collective action can make meaningful contributions to Goal# 16

Businesses can commit to working with governments and civil society to eliminate corruption in all its forms and to support strengthening of the rule of law.

Businesses have the potential to adhere to/ withhold/ influence/ support ...

Effective, accountable and transparent governance	Anti-corruption	Compliance with laws and regulations	Public access to information	Inclusive decision making	Physical and economic displacement
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Goal 16 embraces the core elements of a social contract between state/ business and society as they seek to ensure a match between people's expectations of what the state/ business and other actors will deliver and the institutional capacity available within the state/ business and other actors to meet those expectations.

TARGETS under Goal #16

01. Significantly reduce all forms of violence and related death rates everywhere

02. End abuse, exploitation, trafficking and all forms of violence against and torture of children

03. Promote the rule of law at the national and international levels and ensure equal access to justice for all

04. By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organised crime

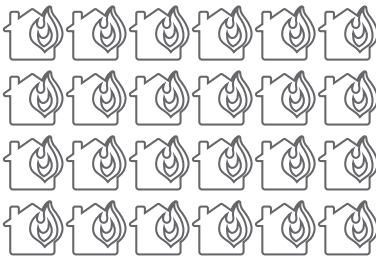
05. Substantially reduce corruption and bribery in all their forms

06. Develop effective, accountable and transparent institutions at all levels

07. Ensure responsive, inclusive, participatory and representative decision-making at all levels

08. Broaden and strengthen the participation of developing countries in the institutions of global governance

09. By 2030, provide legal identity for all, including birth registration



Increase in the number of fatalities due to conflicts between 2008 and 2014

OPPORTUNITY for Business

Conflict Management

Businesses will have to help conflicted regions recuperate through infrastructure services and low-cost products.

Security measures

Businesses will have to employ digital vigilance and resilience to protect vulnerable customers.

Collaboration

Businesses will have to create partnerships for responsible and ethical sourcing.

Businesses need to focus on reinstating infrastructure in conflicted regions, leverage digital technologies to disseminate emergency and awareness information and develop partnerships for setting codes of ethics.

How can business CONTRIBUTE to Goal #16?*

- 01.** Comply with laws and seek to meet international standards; require and support business partners to do the same

02. Commit to and implement conflict sensitive, lawful and transparent operational policies and practices, including on human resources, public and corporate procurement, and in the value chain
- 03.** Conduct risk and impact assessments to identify and mitigate risks of contributing to corruption, violence and conflict, and weakening of the rule of law and identify opportunities for positive impacts

04. Measure and report on implementation progress, including on operations in high-risk areas

- 05.** Engage in public-private dialogues, partnerships and collective action in conflict prevention, peacekeeping, peacebuilding, anti-corruption and the rule of law.

**The above examples are non-exhaustive and some may be more relevant to certain industries than to others.*

Tata Group Institutions

CASE STUDY 60

With the aim to provide inclusive societies for sustainable development, Tata group has founded and supported several institutions. The Tata group helped build effective accountable and inclusive institutions at all levels to ensure equal access to education and medical facilities. Further, these institutes also serve as platforms to preserve and promote culture, literature and art forms that help strengthen social fabric.

Tata Institute of Fundamental Research (TIFR)

The need to improve India’s scientific temper and strengthen the nation’s science infrastructure were the objectives that drove scientist Homi J Bhabha, and JRD Tata, the then Chairman of the Tata group, to pursue their vision of establishing TIFR in Mumbai, back in 1945. TIFR became the cradle of the country’s atomic energy endeavour. The Institute wasn’t just about science; it was also about discovering and delivering the benefits drawn from science to the Indian society. Given that there was little scientific and industrial infrastructure at the time, TIFR came to play a crucial role.

Indian Institute of Science (IISc)

IISc, a deemed university, serves as a window to the external world to gauge the



competence of research and development related to science and technology in India. It is housed at a 375-acre campus in Bengaluru, and has 40 departments and centres pursuing R&D and teaching in all departments of science, engineering and technology. Its library, devoted to science and technology, is the largest in the country.

The Institute serves as a national consultant on issues pertaining to space research, electronic designs, power projects, civil constructions and environmental planning. It works in association with the Indian Space Research Organisation and the Defence Research and Development Organisation on many projects.

JRD Tata Ecotechnology Centre (JRDTEC)

The flag bearer of the ecotechnology movement in India, JRDTEC is part of the MS Swaminathan Research Foundation, Chennai. Established in 1996, the Centre was born of renowned agricultural scientist Mr. Swaminathan’s conviction that an optimum blending of traditional wisdom and scientific endeavour that nurtures and protects the environment, is the bedrock of truly sustainable development.

Tata Institute of Social Sciences

Set up in 1936, TISS is a pioneer in the field of social-work education in the Asia-





Pacific region. The Institute, which offers postgraduate and doctoral programmes, has made significant contributions in the domains of social policy and planning, intervention strategies and human resource development.

National Centre for Performing Arts (NCPA)

The NCPA was the brainchild of JRD Tata and Dr. Jamshed Bhabha, two visionaries who saw India’s need for an all-encompassing world-class performing arts centre, and the role that celebrating and preserving art and culture plays in strengthening a country’s social fabric.



interaction with the arts of other countries.

Tata Medical Centre (TMC)

TMC is a comprehensive centre for the prevention and treatment of cancer and for research. It is a landmark on the global health map and particularly important to this part of the world. Nearly 25,000 patients visit the clinics each year, not only from all over India but from neighbouring countries as well. About 60 per cent of patients seeking primary care are treated free of charge. Over the years, TMC has also realised the importance of preventive activities and is reaching out to create awareness even in rural areas.



The National Centre for the Performing Arts (NCPA), Mumbai, is India’s premier cultural institution. The NCPA was the brainchild of JRD Tata and Dr. Jamshed Bhabha, two visionaries who saw India’s need for an all-encompassing world-class performing arts centre.



PARTNERSHIP FOR THE GOALS

Strengthen the means of implementation and revitalise the global partnership for sustainable development

Revitalising the global partnership for sustainable development. Achieving sustainable development agenda requires partnerships between countries, the private sector and civil society. Inclusive partnerships based on shared vision and goals are needed across geographies.

TARGETS under Goal #17

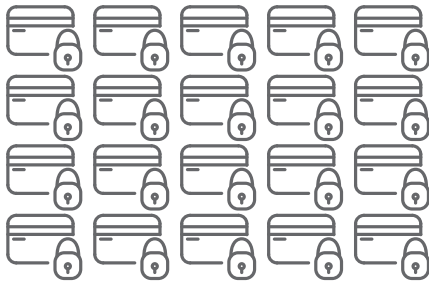
Finance

- 01. By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round
- 02. Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of ODA/GNI to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries ODA providers

are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries

- 03. Mobilise additional financial resources for developing countries from multiple sources
- 04. Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress

GAP IN INVESTMENT FOR SDGs



Yearly current gap in investments identified to meet SDG targets

- 05. Adopt and implement investment promotion regimes for least developed countries

Technology

- 06. Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

- 07. Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed

- 08. Fully operationalise the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology

Capacity building

- 09. Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation

- 10. Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organisation, including through the conclusion of negotiations under its Doha Development Agenda

- 11. Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020

- 12. Realise timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organisation decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access

Systemic issues: Policy and institutional coherence

- 13. • Enhance global macroeconomic stability, including through policy coordination and policy coherence
- Enhance policy coherence for sustainable development
- Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development.

Systemic issues: Multi-stakeholder partnerships

- 14. • Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge,

expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries

- Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Systemic issues: Data, monitoring and accountability

- 15. • By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts
- By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries.

WHY Goal #17 matters?

- 01. Gap in investment for SDGs -** \$3.1 trillion per year is current gap in investments identified to meet SDG targets

02. Need for assistance - Official development assistance stood at \$135.2 billion in 2014, the highest level ever recorded

03. Internet connectivity lags - More than four billion people do not use the Internet, and 90 per cent of them are from the developing world
- 04.** By 2030, the least developed countries will export significantly more than they do now

05. 30 per cent of the world's youth are digital natives, active online for at least five years

06. 79 per cent of imports from developing countries enter developed countries duty-free.

Promoting international trade, and helping developing countries increase their exports, is all part of achieving a universal rules-based and equitable trading system that is fair and open, and benefits all.

Are we ready to accept and promote this?

Sources: Poverty rate (World Bank) <http://data.worldbank.org/indicator/SI.POV.DDAY>.

BUSINESS & Goal #17: What's the Connect?

Urgent action is needed to mobilise, redirect and unlock the transformative power of trillions of dollars of private resources to deliver on sustainable development objectives.

Long-term investments, including foreign direct investment, are needed in critical sectors, especially in developing countries. These include sustainable energy, infrastructure and transport, as well as information and communications technologies.

Businesses should set up local production facilities aligned to sustainable development, leveraging digital technologies in partnership with industry and civil bodies.

The world today is more interconnected than ever before. Improving access to technology and knowledge is an important way to share ideas and foster innovation.

Coordinating policies to help developing countries manage their debt, as well as promoting investment for the least developed, is vital to achieve sustainable growth and development.

The goals aim to enhance North-South and South-South cooperation by supporting national plans to achieve all the targets.

BUSINESS & Goal #17: What's the Connect?

Enablers required to drive value creation by enabling partnerships to promote global development

Set up local production facilities and distribution networks to deliver customised products and services.

Utilise digital infrastructure to scale solutions in developing countries where people have basic access to telecom.

Drive investments in R&D to drive reduction in production costs and customise the product to meet basic development needs.

Enable partnerships with civil societies to provide last mile connectivity and distribution to reach customers in developing countries.

Re-structure and transform current infrastructure to improve the sustainability performance in terms of consumption of material inputs and emissions.

Enable digital infrastructure to socialise and promote the benefits of leveraging sustainable.

Drive sectoral based funding mechanisms and leverage rebates to de-risk the move towards sustainable alternatives technologies for a particular sector.

Partner with industry peers, public sector and civil societies to policy incentives and mechanisms to enable and accelerate move to sustainable business models.

OPPORTUNITY for Business

Innovative business models generate attractive returns while meeting social and environmental goals.

- 01.** Enable low-cost production and connectivity to remote areas to spur the growth of developing countries.

02. Create partnerships to leverage public sector funds and drive alternative business models.

Businesses should set up local production facilities aligned to sustainable development, leveraging digital technologies in partnership with industry and civil bodies

How can business CONTRIBUTE to Goal #17?*

- 01.** Enable transfer of sustainable technologies to developing countries.

02. Encourage the growth of multi-stakeholder partnerships to help implement SDGs.
- 03.** Support developing countries in implementing SDGs.

04. Mobilise funding for developing countries to implement SDGs.
- 05.** Enhance global trade flows through an equitable multilateral trading system.

*The above examples are non-exhaustive and some may be more relevant to certain industries than to others.

CASE STUDY 61

Rainforest Alliance

The sustainable sourcing strategy is focused on sustainable agricultural practices. It describes their principles and code of conduct in purchasing tea and coffee for packaging and processing units. It recounts minimum requirements on social and working conditions, safety and environmental demands, and agricultural practices as suppliers of tea and coffee. TGBL's collaboration with the Rainforest Alliance is big effort in responsible sourcing. Working with Rainforest Alliance, TGBL is able to tackle specific sustainability issues within the tea sector.

What did Tata Global Beverages do?

Rainforest Alliance is an international non-profit organisation that works to conserve biodiversity and ensures sustainable livelihoods. It enables TGB to tackle specific sustainability issues within the tea sector. TGB is committed to sourcing 100 per cent of its black teas from Rainforest Alliance Certified™ farms for all Tetley-branded teas in EMEA (Europe, Middle East and Africa) and CAA (Canada, Australia and America) regions by 2016. More than 50 per cent of Tetley tea worldwide is now Rainforest Alliance Certified™. TGB's associate plantation companies — Kanan Devan Hill Plantation (KDHP), Watawala in Sri Lanka and Tata Coffee — are Rainforest Alliance Certified™.



Project impact

- At the heart of the Rainforest Alliance's approach is the understanding that the health of the land is inextricably connected to the well-being of those who depend on it for their livelihoods. Their approach includes training and certification to promote healthy ecosystems and communities in some of the world's most vulnerable ecosystems
- They work with forward thinking farmers, foresters and tourism entrepreneurs to conserve natural resources and ensure the long-term economic health of forest communities. In order for a farm or forestry enterprise to achieve Rainforest Alliance certification, or for a tourism business to be verified, it must meet rigorous standards designed to protect ecosystems, safeguard the well-being of local communities and improve productivity. The Rainforest Alliance then links these farmers, foresters and tourism businesses to the growing global community of conscientious consumers through the green frog seal
- The Rainforest Alliance Certified™ seal is an internationally recognised symbol of environmental, social and economic sustainability that helps both businesses and consumers do their part to ensure a brighter future for us all.

Key success factors: What worked?

- The 2013 Sustainable Standard-Setter Award presented to TGB by the Rainforest Alliance recognises TGB's ongoing dedication, innovation and leadership in environmental conservation
- TGB is on target to achieving its commitment to sourcing 100% of its black teas from Rainforest Alliance Certified™ farms for all Tetley-branded teas in EMEA (Europe, the Middle East and Africa) and CAA (Canada, Australia and America) regions. Currently, more than 50% of Tetley tea worldwide is Rainforest Alliance Certified™.

CASE STUDY 62

Partnering for Disaster Management

Tata Sustainability Group (TSG) has identified group companies, called 'Lead Companies' for faster dissemination of aid to disaster afflicted areas. These Lead Companies are chosen based on best suitability to help within each state. Tata group partners with strong external agencies and non-profits specialised disaster relief work in the aftermath of a disaster. As a part of its efforts in developing disaster response frameworks within the entire Tata group, TSG also collaborates with Tata companies and the Tata Trusts to develop Project Managers – Managers with the requisite knowledge and capabilities to manage future disaster response initiatives of the Tata group.

What did Tata group do?

- Tata group possesses a workforce with a great breadth of geographical expertise and functional competence that are of great significance when disasters strike. The Tata group has been responding to disasters to help communities recover to 'build back better' in all the three phases of Disaster Response – emergency response, relief, and rehabilitation. With a focus on building resilience and creating support systems that alleviate people's suffering after disasters, various means are employed to facilitate this relief and rehabilitation
- Under the guidelines and framework set up by TSG, a situation analysis is conducted to evaluate the immediate requirements of the affected communities, identify the long-term goals and estimate the resource requirements. Thereafter, Lead Companies are identified and Project Managers who have been handpicked, and have undergone disaster management training, are deployed to the disaster hit zones for 1-6 months. These Project Managers oversee all relief and rehabilitation efforts and coordinate with the Steering Committee, Tata Lead Companies and external partners to reach affected communities in affected areas.

Project impact

- The Tata group has responded to more than 50 disasters in the last two decades.
- It has provided relief to 400,000 affected families in India and Nepal.

Challenges

- Strengthening work on Disaster Risk Reduction during the 'peace time'
- Reducing reaction time in the event of a disaster - Leveraging technology and using new platforms has been identified as a solution for this challenge.



GOAL# 17 IMPACTS

- Multi-stakeholder partnerships
- Finance

VALUE LEVERS FOR THE COMPANY

- Brand and reputation
- Company and employee resilience

CASE STUDY 63

Partnerships for Corporate Volunteering

Tata Engage is a group level volunteering platform to encourage and facilitate volunteering among employees, their family members and retirees around the globe. Tata group Volunteers engage with the community by contributing their time and skills under different volunteering formats. While short term volunteering activities, and skills-based weekend volunteering programmes are already running, there’s also the aim to launch a 3-6-month, full-time deputation, volunteering format by FY2016-17.

What did Tata Engage do?

Launched on March 3, 2014 on the 175th birth anniversary of the founder Jamsetji Tata, Tata Engage institutionalises volunteering across the Tata group, in a manner whereby its efforts are invested in areas where they are needed the most. Volunteering activities are planned in a way that the outcomes are more fruitful and sustainable – this has been achieved by executing volunteering activities in two different formats.

Tata Volunteering Week

Each Tata Volunteering Week (TVW) is celebrated group-wide across a four-week period, twice in a year. The key objective of this initiative is to encourage and inspire Tata employees to experience volunteering and eventually pursue it on a regular basis. Till date, TSG has successfully conducted six such celebrations with enthusiastic participation from Tata employees across geographies. Each TVW has broken participation records set by the previous one.

ProEngage

ProEngage is a part-time, skill-based volunteering programme, which offers volunteers the unique opportunity to contribute their domain expertise and helm exciting projects that can help civil society organisations achieve their goals faster. This

is three-to-six-month long volunteering format wherein volunteers offer their time and efforts, for a few hours, over the weekend – either remotely or from the Non-profit centre closest to their location.

Engage+

Set to re-launch in 2017, Engage+ is a full pay, six-month, by invitation, volunteering opportunity wherein selected volunteers will be on a full-time deputation with an NGO and spearhead a project of significant social importance.

Project impact

- Tata group achieved 1.2 million volunteering hours in FY2016-17 with the support of Tata companies, moving it up to the list of top 10 corporates recognised for its volunteering effort
- Tata Volunteering Week has partnered with over 650 NGOs across 150 locations (FY2016-17)
- ProEngage has partnered with 54 Non-profits across 15+ cities (FY2016-17).

GOAL# 17 IMPACTS

- Multi-stakeholder partnerships
- Employee development and increased productivity

VALUE LEVERS FOR THE COMPANY

- Corporate visibility

Challenges

- The need for better technical improvements to track volunteering initiatives and hours
- CSR Act does not recognise volunteering as CSR expenditure
- Policy level changes to be able to encourage sabbatical based volunteering.

Key success factors: What worked?

- Creation of technological platforms that have been adapted for company, partner and volunteer use
- Boosted leadership capacities through having Specific Points of Contact (SPOCs) across Tata companies
- Successful launch of three distinct volunteering formats to cater to specific needs of Non-profits and volunteers
- Engaging family members of employees, as well as retired Tata colleagues
- Cross collaboration between companies facilitates sharing of specific skills and capabilities with Non-profits

CASE STUDY 64

Tata group’s Adoption of the Natural Capital Protocol

The Tata group is one among 50 leading global companies to pilot the Natural Capital Protocol across four group companies – Tata Power, Tata Steel, Tata Chemicals and Jaguar Land Rover.

Member of the Tata group shared their experiences from the piloting and what they discovered and their learnings at the launch event in July 13, 2016, where global leaders from business, finance, accounting, conservation, academia and research, standards setting and policy gathered in London for the launch of the world’s first Natural Capital Protocol.

The Natural Capital Protocol is a product of the Natural Capital Coalition. The Coalition is a collaboration of the world’s leading organisations from business, accountancy, science and academia, membership organisations, standard setting, finance, policy and conservation, who have come together through a common vision of a world where business conserves and enhances natural capital.

Project impact

The Natural Capital Protocol is a standardised framework designed to generate trusted, credible, and actionable information that business managers need to make truly informed decisions. It has helped bring together and build on a number of approaches that already exist. It helps business measure and value natural capital, and, by harmonising them, thereby, allowing businesses everywhere to benefit from understanding their relationships -with nature.

Four Tata companies have made it among the top 10 of the Futurescape rankings list the Tata group was also ranked first in the GlobeScan sustainability leadership survey conducted in Asia for advancing the sustainable development agenda.

Tata group companies are pioneering new-genre sustainability initiatives in

circularity, lifecycle approaches, new mobility and materials, biodiversity conservation, and even affirmative action.

As a group, Tata group has also begun tweaking and evangelising a Natural Capital Protocol, an area where few companies have dared to tread.



GOAL# 17 VALUE LEVERS FOR THE COMPANY

- Tata group companies are pioneering new-genre sustainability initiatives
- The Tata group is emerging as a sustainability champion among corporates, especially in the Asia-Pacific region
- Evangelising Natural Capital Protocol among peers

CASE STUDY 65

Partnering for Sustainable Development

Since its inception, the Tata Trusts have played a pioneering role in transforming traditional ideas of charity and introducing the concept of philanthropy to make a real difference to communities. Through grant-making, direct implementation and co-partnership strategy, the Trusts support and drive innovation in the areas of natural resources management; education; healthcare and nutrition; rural livelihoods; enhancing civil society and governance; arts, crafts and culture; and diversified employment.

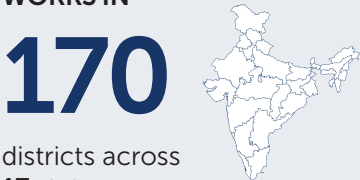
What did Tata Trusts do?

- In order to enhance impact and ensure that interventions are sustainable, the Trusts have adopted a cluster-based approach, supporting multiple interlinked activities in identified clusters of contiguous villages across select geographies in India
- The key focus areas of the Trusts include in the areas of health, water, energy, rural upliftment, education programmes, urban poverty alleviation, individual grants and others
- The Trusts engage with competent individuals, government bodies, international agencies and like-minded private sector organisations to nurture a self-sustaining eco-system that collectively works across all these areas
- In addition to promoting and facilitating initiatives in elementary education, the Tata Trusts continue to award fellowships and merit scholarships to students pursuing higher studies. It has groomed social scientists, cancer specialists, nuclear scientists and distinguished institutional administrators, who in turn, have striven to make the country a power

Key success factors: What worked?

Today, spread over 17 states and 170 districts across the country, programmes supported by the Trusts reach out to millions of households through an efficient network of 450 plus partner organisations. Additionally, the Trusts' projects and initiatives, especially in the area of educational attainment, significantly contribute to building intellectual capital in the country.

WORKS IN
170
districts across
17 states



PARTNERS
450
organisations of
various causes



GOAL# 17 IMPACTS

- Strong multi-stakeholder partnerships
- Reaching the last mile
- Finance

VALUE LEVERS FOR THE COMPANY

- Brand and Reputation - Tata is a Good Corporate Citizen

- to reckon within various fields, including science and technology
- The Trusts not only provide grants and help to mobilise funds; they also offer on-ground support to communities directly and in partnership with other stakeholders
- The Trusts support causes and initiatives that provide disaster relief and aids in rescue work in case of humanitarian crises.

REACHES OUT TO

millions

of households
across the
country



Key focus areas

Health



Tackling malnutrition and enhancing preventive and curative health services among under served populations

Energy



Supporting and implementing sustainable energy projects in the rural belts

Education Programmes



Providing quality education for children, especially for those from marginalised backgrounds

Individual Grants



Providing financial support to deserving individuals in the areas of medical treatment, education, travel and sports

Water



Providing access to water for drinking, livelihood and sanitation

Rural Upliftment



Ensuring inclusive growth of marginalised populations in both rural and urban areas

Urban Poverty Alleviation



Enabling sustainable livelihoods to empower urban poor

Others



Other interventions by the Trusts which include data-driven governance, civil society strengthening, media, arts, crafts and culture, relief and rehabilitation programmes, accomplishing long-lasting change through novel solutions to developmental problems and seeding, strengthening and supporting institutions of research and higher learning

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April 2017

TATA SUSTAINABILITY GROUP

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