

# Management Discussion and Analysis

## 1. Business Environment

### a. Global Economic Outlook

The Covid-19 pandemic led to an economic contraction in the Calendar Year ('CY') 2020 that was both sudden and deep compared to the previous global crises.

The global economy contracted 3.3%, advanced economies contracted 4.7% whereas the emerging economies and developing markets contracted by 2.2%. China was the only major economy that grew (by 2.3%) in CY 2020. World trade volume (goods and services) declined by 8.5% and oil prices saw a sharp decline of 33% followed by a recovery in the second half of the year. Consumer prices in emerging economies increased by 5.1% whereas they were stable in the advanced economies. Global manufacturing contracted sharply in mid-2020 however, sharply recovered in the latter part of the year. Lingering uncertainties around the pandemic hindered the recovery of private investment.

With the consideration of broad vaccine availability in advanced economies and some emerging economies, the global economy is projected to grow at 6% in CY 2021. Growth in the advanced economies is projected at 5.1% in CY 2021, whereas that in the Emerging Markets & Developing Economies ('EMDE') is expected to be 6.7%.

Growth in the United States ('US') is expected to be 4.3% in CY 2021, regaining the pre-covid activity levels. The European Union and the United Kingdom ('UK') economies are expected to grow by 4.5% and 4.2% respectively in CY 2021. Among the EMDE, China is expected to grow by 8.5%, Russia and Brazil by 3% and 3.6% respectively in CY 2021.

Downside risks to the outlook include resurgence of the pandemic and vaccine delays, withdrawal of policy support before recovery takes firm root and bankruptcies due to illiquidity & high debt and geopolitical trade risks such as ongoing tensions between the US and China.

*Source: IMF World Economic Outlook (WEO), January and April 2021, OECD Interim Economic Assessment, March 2021*

### b. India Economic Outlook

India was one of the most severely affected countries among the emerging economies. Its Gross Domestic Product ('GDP') contracted by 8% in CY 2021. While Government consumption was almost stable at (0.8)%, private consumption declined by 9.1%. Exports and imports of goods and services contracted by 9.3% and 17% respectively. The agriculture sector was resilient to the effects of Covid-19. The industrial production contracted by 11%.

India's recovery in FY 2021-22, with estimated GDP growth of 11.5% at the beginning of CY 2021, has seen a downward revision between 9.6% and 10.5% due to rising Covid-19 infections at the beginning of FY 2021-22. Increasing unemployment, as reported by the Centre for Monitoring Indian Economy (CMIE) (7.9% in April 2021 against 6.9% in February 2021) and inflation (Wholesale Price Index – 7.4% highest in last 103 months) signal a risk to the recovery. However, the outlook is expected to become more positive by the middle of the year as vaccines become more widely available.

The Government spending is estimated to be higher than the previous financial year with fiscal deficit at 7.2% of GDP as against a budgeted 6.8%, mainly due to a higher food subsidy bill and lower asset sale revenue. The export outlook is cautious as exporters are focussing on domestic issues. Monetary conditions are expected to remain accommodative as inflation increases with an upside risk caused by rising global commodity prices.

*Source: Various reports – IMF World Economic Outlook, Oxford Economics, RBI State of Economy*

## 2. Chemical Industry

### a. Global Chemical Industry

Demand for chemical products hit a trough in Asia around February/March 2020, in Europe around April 2020 and the Americas in May 2020, reflecting the peak of Covid-19



The agriculture sector was resilient to the effects of Covid-19

lockdowns. Demand gradually recovered in the US and Europe following the fall in Covid-19 infection rates. The recovery in Asia has been more robust and is expected to continue in CY 2021. Increase in Government and consumer spending has boosted demand for many chemicals.

Commodity chemicals producers will see recovery and Specialty chemicals producers with more diverse and resilient end markets will continue to see growth in CY 2021.

## b. Key Global Trends

Sustainability has increasingly become a focus for many chemical companies globally and the trend will gain further momentum in CY 2021. Large companies are leading the way to net-zero greenhouse gas emission commitments. Initiatives such as European plastic tax and green hydrogen stimulus packages in the US, Canada and Europe are accelerating the adoption of sustainable practices and goals.

The centre-of-gravity of the economic world will further re-balance with by simultaneous shifts, from west to east, from rural to urban, ageing to young economies. Asia's role in global chemicals demand and trade will be even greater over the next decade.

The changing composition and expectations of hyper-connected consumers will trigger structural industry and consumption shifts towards good health, personal wellness, 'green' products and plant-based nutrients.

## c. Indian Chemical Industry

While the Indian chemical industry was adversely affected due to Covid-19 in the first half of CY 2020 resulting in disrupted supply chains and reduced demand, it witnessed a recovery in the second half of CY 2020. As seen in the Index of Industrial Production (IIP) for Chemical Manufacturing, the demand recovery is expected to continue in FY 2021-22 and will achieve pre-Covid levels.

The Indian Chemical Industry has a structural and locational advantage to rapidly grow from its current size of US\$ 178 billion to US\$ 300 billion over next 5 to 7 years. In addition to its demographic dividends, India has one of

the lowest per capita consumption of chemicals, offering adequate headroom for the sector to grow. Its vantage location provides opportunities in servicing export demand.

Basic Chemistry Products such as Alkali chemicals are the primary growth drivers for inorganic chemicals having a stable outlook. Specialty chemicals account for a major share of chemical exports, dominated by agrochemicals, dyes and pigments. Consumer trend towards good health to drive demand for home and personal care items such as nutraceuticals, food ingredients and packaged food & beverages. The Government of India aims to transform India into a manufacturing hub for crop-protection chemicals. The Indian market is estimated at ₹ 43,000 crore, of which exports are ₹ 23,000 crore. The sector is expected to grow more than 9% over the next 5 years with exports growing faster than the domestic market.

*Source: Various reports – Federation of Indian Chamber of Commerce & Industry (FICCI) Report, Internal Assessment, Moody's Report*

## 3. Company Overview

A part of the US\$ 106 billion (revenue as on March 31, 2020) Tata Group, Tata Chemicals Limited ('the Company' or 'TCL') is a Science-led chemistry solutions company.

Having espoused the corporate purpose of 'Serving Society through Science', the Company has come a long way from laying its roots in Mithapur, Gujarat with its soda ash and salt operations. Its operations span continents, serving a diverse set of customers across the globe. The diverse portfolio is divided into Basic Chemistry Products and Specialty Products comprising Performance Materials, Nutrition Sciences and Agri Sciences.

Performance Materials, Nutrition Sciences and Agri Sciences are poised for robust growth along the vectors of sustainability and good health.

The Company is a global major in soda ash and sodium bicarbonate (market position of 3rd and 6th respectively) with manufacturing facilities in India, US, UK and Kenya.



Consumer trend towards good health to drive demand for home and personal care items such as nutraceuticals, food ingredients and packaged food & beverages

The emerging Performance Materials division includes high performance silica products based on patented technology for the rubber applications, food, feed, detergents and oral care.

The Company has a domestic market leadership position in the Nutrition Sciences. It offers edible salt, sodium bicarbonate (food, feed and pharma grade) and prebiotics (fructooligosaccharides ['FOS']).

The Company in recent years has built a robust and high-growth fermentation platform that provides attractive future growth opportunities. Currently, the platform supports the prebiotics category with its FOSSENCE® and GOSENCE® brands targeted at food and nutraceutical applications.

Rallis India Limited, a subsidiary of the Company ('Rallis') is a leading Agri Sciences Company with product portfolio in Crop Care and Seed categories. It connects with farmers through 4,000+ dealers and has a presence in the export Business-to-Business (B2B) market with formulations and actives. Its key products are acephate, hexaconazole, pendimethalin and metribuzin in which it holds a leadership position in the domestic market. Rallis is expected to drive its growth with a robust product innovation pipeline and manufacturing capacity expansion.

The Company's businesses are supported by pillars of safety, sustainability, operational excellence, customer focus, innovation and digitisation. The Company has committed to Science Based Targets initiative ('SBTi'), with a target of 2 degrees reduction for its operations. Its Carbon Capture and Usage plant in the UK is one of the first of its kind globally. It captures CO<sub>2</sub> emitted by the gas-powered energy system and uses it as a feedstock to manufacture high purity sodium bicarbonate for the pharma and food industries.

The Company supports key communities with development models that are sustainable, replicable and scalable. It also promoted biodiversity in a significant way through plantation, ecosystem creation, species conservation, water and resource conservation around its plants.

The Company believes in 'Science-led Differentiation' that creates value for its customers. The Company has made consistent and significant investments in innovation, be it in process innovation, product innovation or those that have led to a great customer experience. It has two world-class Research and Development (R&D) facilities in Pune and Bengaluru from where products such as Highly Dispersible Silica ('HDS'), FOS and Ayaan (fungicide), amongst others have emerged.

Operational excellence permeates every aspect of the Company's operations and its people. On-going initiatives of cost reduction, faster resolution of customer issues, go-to-market approach for new products and world-class manufacturing facilities are a few of how this pillar manifests itself.

Investments in digitisation have enabled the Company to implement several initiatives that have accelerated the Company's journey towards excellence. Several analytics, IoT, remote sensing and automation-based initiatives have been implemented across the Company's operations leading to substantial gains.

## 4. Operational Performance

### a. Tata Chemicals Overview

#### i. Impact of Covid-19

FY 2020-21 has been a challenging year which tested the Company's intrinsic strength in the face of the global Covid-19 pandemic. After initial operational hiccups, the Company was able to adapt to the changed circumstances and operations normalised relatively quickly.

The Company responded swiftly to support its key asset, its people, by deploying a slew of initiatives related to employee well-being. These included remote working, medical support for the affected, rigorous safety protocols, amending human resource (HR) processes and the launch of an assistance program 'We Care' to support its people's physical and emotional well-being. Frequent updates, advisories, notifications, virtual town halls reinforced the connection and belongingness to the Organisation.



The Company has committed to Science Based Targets initiative ('SBTi'), with a target of 2 degrees reduction for its operations

In India, there have been no layoffs, retrenchment or wage reductions in the permanent and contract workforce.

The Company fulfilled all its contractual obligations and agreements and continues to do so and does not foresee any material impact due to non-fulfilment of obligation by any party in existing contracts or agreements.

As part of the Corporate Social Responsibility (CSR) activities, the Company was able to extend support to the surrounding and extended communities through multiple initiatives. The key initiatives were:

1. The Company manufactured and distributed approximately 1.17 million litres of sodium hypochlorite in Gujarat and approximately 0.6 million litres to Brihanmumbai Municipal Corporation, Mumbai.
2. Financial assistance was provided to various organisations including Chief Minister's fund, District Collector forums, hospitals and rural sector of India.
3. The Company supported Government hospitals with PPE kits for frontline medical workers near factory locations. 1.07 lakh litres of hand sanitiser was manufactured by Akola and Ankleshwar units of Rallis and distributed freely across Telangana, Maharashtra, Gujarat and Karnataka. A 100-bed isolation ward at Mithapur, Gujarat was built to supplement Government structure.

The pandemic led the Company to further build resilience in its operations and systems and in many cases accelerate the implementation of digital initiatives. This includes effective work from home policies, digital product launches by Rallis, digital customer connects through virtual meeting platforms, virtual operational initiatives such as virtual crop tour and remote salt pan monitoring. Zero incidents of breach of information security were recorded despite remote working.

## II. Annual Performance Overview

The Company achieved a consolidated revenue of ₹ 10,200 crore (2% decline over FY 2019-20) and EBITDA of ₹ 1,501 crore (23% decline over FY 2019-20). Despite

challenging demand environment, the Company was able to maintain its market position across businesses. Operations were impacted due to lockdown restrictions to varying degrees across the Company. The soda ash business was impacted the most (sale volume down by approximately 11% in FY 2020-21) with global demand dropping sharply in the first quarter of FY 2020-21. The India and UK businesses normalised sales in the third quarter of FY 2020-21, however, the US and Kenya operations were able to recoup historical baseline sales only in the fourth quarter of FY 2020-21. Pricing remained under pressure especially in the export markets served by Tata Chemicals North America Inc., USA ('TCNA') and Tata Chemicals Magadi Limited, Kenya ('TCML'), subsidiaries of the Company and also in the Indian domestic market.

Nutrition products demand proved to be resilient in FY 2020-21. Sale volume of salt in India grew approximately by 15% and volume of sodium bicarbonate was sustained despite reduced demand. The agri market continued with resilient demand and was able to meet its targets. It faced a supply disruption due to a shortage of key raw materials but was able to counter it by building strategic partnerships to mitigate the risk in the short to medium term. The business also witnessed opportunity losses in the export markets due to the impact of Covid-19 in the USA, Latin America and Europe.

There has been no material change in the Company's liquidity position after the year ended March 31, 2021, with a positive liquidity position in India with no borrowings and sufficient credit lines available. The Company has also instituted, across all its operations, aggressive and focussed cost control programmes and an even more disciplined and prudent capital expenditure program to build up and conserve its already healthy cash position. Further, there is no impact on internal financial controls due to Covid-19.

## b. Basic Chemistry Products

### Industry Structure & Developments

The Company serves customers across five continents through its Basic Chemistry Products ('BCP') business (soda ash, salt, sodium bicarbonate, cement and marine chemicals). The Company's global supply chain gives it



The Company manufactured and distributed approximately 1.17 million litres of sodium hypochlorite in Gujarat and approximately 0.6 million litres to Brihanmumbai Municipal Corporation, Mumbai

the unique advantage of maintaining assured supply and efficient service at competitive prices.

The Company has a soda ash capacity of 4.1 million tonnes. More than two-thirds of this is natural soda ash-based, located in Green River Basin, Wyoming, USA, where world's largest deposits of Trona occur and Lake Magadi in Kenya. In addition to having lower manufacturing costs, natural soda ash has lower energy and environmental footprint. Synthetic soda ash and sodium bicarbonate are manufactured at Mithapur, India and Northwich, UK to cater to their respective domestic and export markets. This process uses raw salt/brine (saltwater) and limestone as key raw materials.

**i. Soda Ash**

As a result of the pandemic, world demand in CY 2020 fell by 5.4%, equivalent to a loss of 3.3 million Metric Tonnes ('MT') over CY 2019. World operating rates outside China averaged 75% this year, down from 85% in CY 2019. Trade shrunk from a total of 16.6 million MT in CY 2019 to 15 million MT due to Covid-19 and its impact on demand and supply chains. A large portion of the demand decline was accounted for by a reduction in consumption of flat glass, the largest application segment for soda ash across key markets of Europe, North America and South-East Asia ('SEA').

Global soda ash prices declined with demand slowdown and supply overhang and recovered slowly as demand began to recover led by China. In other regions, pricing recovery was delayed and more modest as incumbents pushed to sell out available volumes.

Demand in India was severely affected in the first few months of the lockdown primarily from lower consumption from glass and chemical sectors though the detergent sector remained resilient. On the supply side, higher pipeline inventories, domestic operating rates and imports kept the market imbalanced. This coupled with lower import prices kept domestic pricing under pressure for a major part of the year. The demand, however, continued to recover sequentially across all application sectors and by year-end had reached close to normalcy.

**ii. Sodium Bicarbonate**

Sodium bicarbonate is a versatile product with a wide range of applications, including food, food additives, animal feed, pharmaceuticals, dyes, textiles and air pollution control. The Company believes that given its wide range of current and emerging new applications, sodium bicarbonate will sustain consistent growth along with offering significant value addition potential in the future. The Company has a total annual capacity of 240 kilo tonnes per annum (KTPA) in India and the UK.

During FY 2020-21, the Sodium Bicarbonate market remained resilient despite demand contraction in the first quarter. Stable demand from Food and Feed segments coupled with industrial demand in later quarters supported growth. Supplies were largely balanced with imports reducing by 30% during the year.

**iii. Salt**

Being an essential food ingredient, edible salt did not experience demand challenges in India, even when Covid-19 affected demand for most of the sectors. However, in the UK market, the demand for both edible and non-edible applications was affected due to decline in leisure and hospitality sectors.

**c. Specialty Products**

**I. Performance Materials**

TCL's wide range of conventional silica and HDS products allows it to participate in markets poised for growth driven by a push for sustainability across application sectors. While FY 2020-21 witnessed some short-term challenges in select application segments, the overall market demand growth remained healthy. The Company believes that long-term trends, like tightening automotive emission standards and an increase in electric vehicles will drive demand for high-performance, low noise and fuel-efficient green tyres, which need superior materials like HDS.

**II. Nutrition Sciences**

The Nutrition Sciences business of the Company under the brand Tata NQ, offers solutions for human and animal health.



Tightening automotive emission standards and an increase in electric vehicles will drive demand for high-performance, low noise and fuel-efficient green tyres, which need superior materials like HDS

The flagship product - FOSSENCE® is a prebiotic dietary fibre that promotes the growth of the gut microbiome which in turn has been known to positively impact digestive and immune health.

The Company's partnership with Indian and global academic institutions and research bodies, to further understand the gut microbiota and related health effects, is helping the Company build a leadership position in this space. It is gathering deep insights by using bio-informatics in gut microbiota, with the development of accurate Proprietary Predictive (patent applied) models of microbiome response to interventions.

The Company's expertise in fermentation technology, enabling production using the whole-cell route, is also opening up opportunities in other human nutrition segments. Strong application support, which enables close coordination with the customer on new product development projects, provides a deep understanding of a customer's requirements.

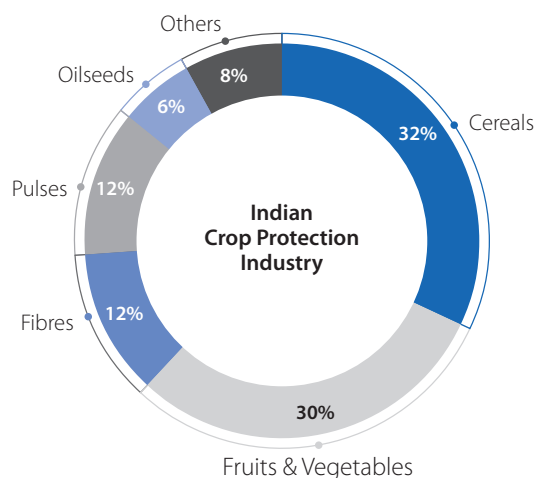
### III. Agri Sciences

A World Bank research study estimated the impact of Covid-19 on agriculture as (3.04)% and (1.29)% [Output implications as % deviations from the benchmark]. The report also estimates a modest growth of the crop protection market compared to the previous year led by Asia and North America. The agriculture inputs industry is being shaped by digital solutions to bring efficiency to operations and help farmers make informed decisions, supported by big data and analytics.

#### i. Crop Care

The global crop protection industry is estimated to be US\$ 60 billion with a Compounded Annual Growth Rate ('CAGR') of (0.9)% during FY 2015-19 depicting the recovery cycle after hitting the peak in CY 2014. Major trends shaping the agrochemicals industry are consolidation of players in crop protection space, stringent regulations and climate change. These trends are providing opportunities to develop innovative solutions for sustainable agriculture involving the biological crop protection segment, which is currently estimated at around US\$ 1 billion.

Indian crop protection business is estimated to be US\$ 6 billion with exports at a higher growth rate than domestic business. Insecticides is the largest segment in the domestic market and is equal to the combined share of fungicide and herbicide. Cereals and fruit & vegetables have a significant share of crop protection usage in the domestic market.



The India market size of specialty fertilisers segment is estimated to be ₹ 10,000 crore consisting of organic fertilisers, biostimulants, biofertilisers, watersoluble fertilisers, secondary and micronutrients. The segment is gaining popularity in India mainly on account of the need to balance the distorted soil nutrient ratio and the greater focus on the quality of agri-produce.

#### ii. Seeds

Genetically Modified seeds and conventional seeds have almost an equal share in the global seeds market which is estimated to be US\$ 40 billion. Maize, Soy and Vegetables form approximately 75% of the global seeds market. Globally, the seeds industry is highly R&D intensive with nearly 15% spend of the sales revenue, but low in India due to lesser number of companies that undertake biotechnology-supported research activities. In India, the organised seeds market is estimated to be US\$ 2.5 billion. Cotton supported by BG II traits is the biggest crop, followed by hybrid maize and hybrid paddy.



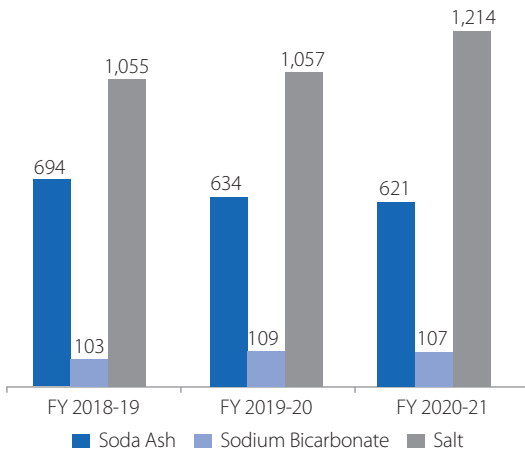
**d. Entity-wise Performance**

**TCL India (Standalone)**

**i. Operations**

Sales trend of Basic Chemistry Products is as follows:

**TCL India- Basic Chemistry Products Sales Volume in '000 MT**



TCL India’s basic chemistry products business witnessed marginal compression in FY 2020-21 mainly due to the reduced demand and prices of soda ash and sodium bicarbonate amidst sequential drops in quarterly GDP growth. Proactive planning, strong customer relationships, robust processes and product configuration changes helped to withstand the downturn. Unprecedented heavy rainfall caused flooding and damage to the Company’s salt works leading to washing away of raw salt and dilution of brine with a consequential increase in cost of this key raw material. However, strict cost control measures and rapid digitisation coupled with a lower cost of fuel kept the total cost of production in control.

TCL India is the largest manufacturer of edible iodised salt in the country. The Company recorded the highest ever sale of salt at 12.14 lakh MT during the year, up from 10.57 lakh MT in FY 2019-20. The Company is investing to increase the salt production capacity

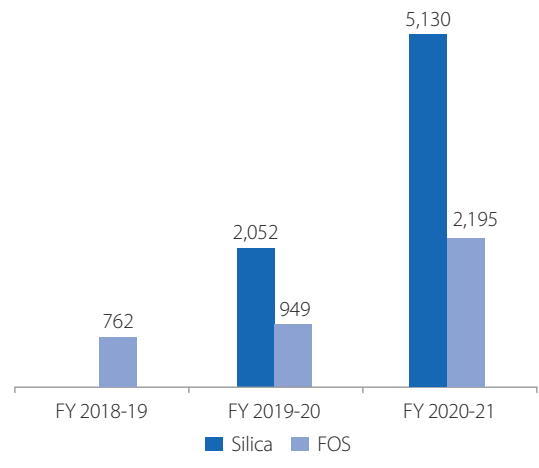
to meet growing demand of its key customer, Tata Consumer Products Limited (‘TCPL’).

For sodium bicarbonate, the Company managed to sustain the sales volume despite reduced demand, however, prices during the year remained under stress. Continuing with our strategy of focussing on high value branded sodium bicarbonate sales, there were some noticeable wins. The Company’s feed and food brands ‘Alkakarb’ and ‘Sodakarb’ registered 33% volume growth due to focussed efforts of market development. Its newest product, specialty pharma-grade - ‘Medikarb’ (India’s first branded pharma-grade sodium bicarbonate) showed a volume increase of 12%.

‘ChemConnect’, the Company’s online customer portal and mobile application, added new functionalities and dashboards for ease of customer support, engagement and navigation. Customer engagement activities such as senior leader connect, annual reward and recognition events for channel partners, town hall meetings and knowledge-sharing sessions, ‘Web pe Charcha’, were the hallmarks of staying connected with the partners.

Sales trend of Specialty products is as follows:

**TCL India-Specialty Products Sales Volume (in MT)**



TCL India is the largest manufacturer of edible iodised salt in the country. The Company recorded the highest ever sale of salt at 12.14 lakh MT during the year

Performance Materials (Silica & Highly Dispersible Silica)

FY 2019-20 marked the start of commercial production and subsequent ramp-up of sales volume that was driven by the launch of several new product grades and expansion of customer base and distribution network. The Company accelerated growth momentum in FY 2020-21 and plans to further improve volumes by broadening and deepening its customer base and delivering on supplies to the high value tyre and rubber customers.

Nutrition Sciences

The Company stabilised its operations at its newly commissioned, state-of-the-art greenfield facility in Nellore, Andhra Pradesh. All important food safety certifications like FSSAI, FSSC 22000, FAMI QS, Halal, Kosher, etc. were achieved and it was awarded a Gold rating in the IGBC green rating system for factories.

With the growth of the distribution network, the Company served customers across the globe, with encouraging response from South East Asia and North America. It was qualified by a few global accounts; few others are in the last stages of qualification and will be favourably concluded soon with this, the Company expects to increase its capacity utilisation.

**ii. Financials**

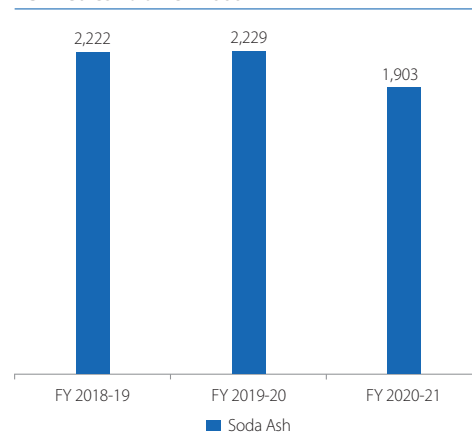
₹ in crore

TCL India	FY 2020-21	FY 2019-20
Revenue from operations	2,999	2,920
EBITDA	611	718
Profit before tax (PBT)	614	834
Profit after tax (PAT)	479	672

The revenue grew 3% compared to the previous year led by higher salt volumes and pricing. Profit before tax reduced by 26% compared to FY 2019-20 mainly on account of the impact of drop in sales realisation in soda ash and sodium bicarbonate impacting the profit. Other reasons for lower PAT include (a) lower income due to drop in yield on surplus investments and (b) higher depreciation on account of ongoing capex.

**Subsidiaries****a. Basic Chemistry Products****Tata Chemicals North America Inc., USA ('TCNA')****i. Operations**

Sales trend of Basic Chemistry Products is as follows:

**TCNA Sales Volume in '000 MT**

In FY 2020-21, the sales volumes of TCNA were lower than the previous year by approximately 15%, primarily on account of reduced demand in the majority of its export markets.

A part of the margin erosion due to this was compensated by tight control on costs in order to hold them at historical levels. This was obviated by unusual extreme freeze which led the sudden spike in gas prices from US\$ 2 Dekatherm ('DTHM') to US\$ 150 - US\$ 175 DTHM which impacted the Company by approximately US\$ 6 million.

**ii. Financials**

₹ in crore

TCNA	FY 2020-21	FY 2019-20
Revenue from operations	2,878	3,403
EBITDA	351	762
PBT	(170)	348
Profit after tax and non-controlling interest	(197)	212



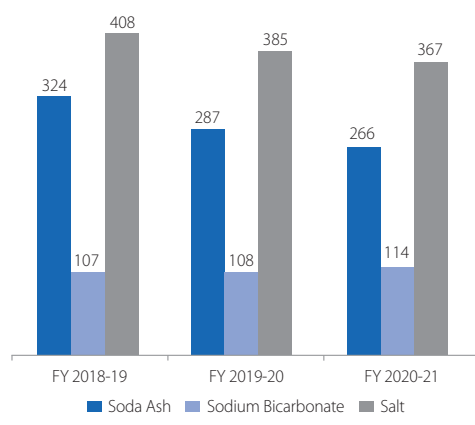
The revenue declined by 15% compared to the previous year due to lower soda ash volumes against the previous year. In particular, export market volumes and pricing were impacted. Negative PAT is led by lower operating performance coupled with one-off expenses on energy price spike and refinancing costs.

### TCE Group Limited, UK ('TCE Group')

#### i. Operations

Sales trend of Basic Chemistry Products is as follows:

TCE Group Sales Volume in '000 MT



TCE is the leader in the UK's soda ash market. The plant operated continuously throughout the year and in line with the expectations. Prices in the market came under some pressure as new contracts were negotiated for CY 2021. Energy costs generally tightened as the year progressed. The associated energy business had a robust year, generating good income and contributing strongly to the soda ash and energy business performance.

The UK salt market volumes were down on account of the Covid-19 pandemic with leisure and hospitality closures weakening the market demand. It is expected this demand will return as the UK heads out of the Covid-19 pandemic in summer 2021. Despite some delays caused by the pandemic, the new boiler at the salt plant is now operational which will increase energy efficiency and lower carbon emissions by 10% or more.

The UK sodium bicarbonate market had a strong year both domestically and in exports with sales

and production volumes hitting records during the year. FY 2021-22 will be the year that the new carbon capture plant takes centre stage in the next phase of high-grade sodium bicarbonate.

#### ii. Financials

₹ in crore

TCE Group	FY 2020-21	FY 2019-20
Revenue from operations	1,409	1,356
EBITDA	138	157
PBT	(39)	13
PAT	(55)	14

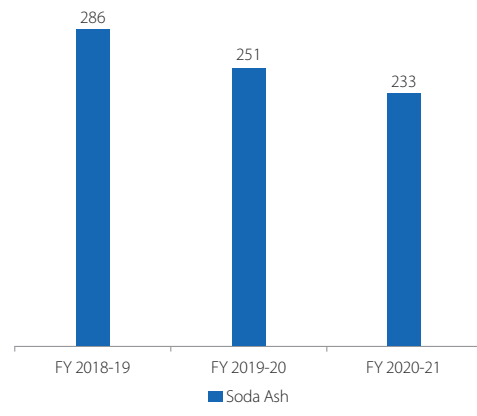
The revenue grew 4% compared to the previous year led by higher salt and sodium bicarbonate revenue along with steady soda ash revenues. PAT reduced due to higher fixed costs, higher depreciation and certain one-off tax related charges.

### Tata Chemicals Magadi Limited, Kenya ('TCML')

#### i. Operations

Sales trend of Basic Chemistry Products is as follows:

TCML Sales Volume in '000 MT



Soda ash is the key product in TCML portfolio, mainly servicing container glass and silicate sectors in the East African domestic market and export markets in SEA and Indian subcontinent.

Sales volumes were lower primarily due to slack export demand caused by the pandemic with the corresponding decline in pricing.

A tight control on costs and especially lowering of fixed cost coupled with lower sea freight helped mitigate some of the margin pressure caused by lower volumes and prices.

ii. **Financials** ₹ in crore

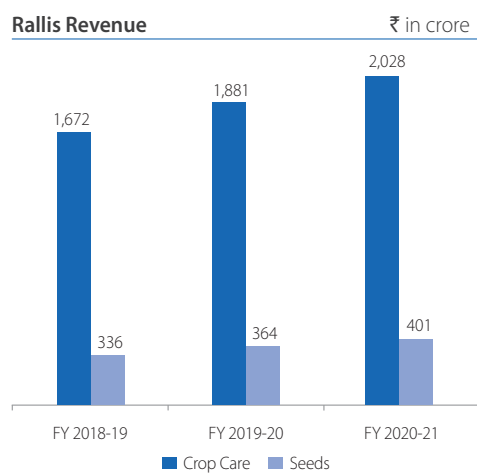
TCML	FY 2020-21	FY 2019-20
Revenue from operations	413	474
EBITDA	62	49
PBT	20	1
PAT	20	1

The revenue declined 13% compared to the previous year due to lower soda ash volumes and prices. However, PAT improved by ₹ 19 crore on account of tight control on fixed costs.

b. **Specialty Products**

**Rallis India Limited ('Rallis')**

i. **Operations:**



Note: Excluding inter-company transactions

Value growth across Domestic and International business was satisfactory. Rallis' Crop Care division registered an increase of 7.9% in revenues at ₹ 2,028 crore. While the outbreak of Covid-19 posed challenges, it led to customers having better faith in the ability of established brands to meet the requirements. This led to growth in several of Rallis' products. The Seeds division recorded a growth of 10% despite decline in cotton business. Satisfactory volume growth and better price realisation was registered in maize, millet and vegetables.

ii. **Financials** ₹ in crore

Rallis	FY 2020-21	FY 2019-20
Revenue from operations	2,424	2,248
EBITDA	325	257
PBT	303	237
PAT	229	185

Note: The figures are as per TCL's consolidated books

The revenue grew 8% compared to the previous year on account of growth in both Crop Care and Seeds division. In particular, the Domestic Formulations business performed well during the year. PAT grew 24% compared to the previous year led by higher operating margins and tight control on fixed costs.

## 5. Business Outlook

The Company continues to focus on driving its transformation agenda to grow businesses and products that serve customer needs along the vectors of sustainability and good health. These megatrends would drive demand growth in sectors such as food, feed and pharma and also in sustainability driven applications like solar glass, lithium carbonate, new generation of tyres and a shift from plastic to glass containers. In turn, these would continue to drive the Company's current and future investments especially in its specialty products portfolio as ingredient supplier of choice to these sectors.

Globally, soda ash demand is increasing after the dip in FY 2019-20 with spot prices beginning to move upward as a lag-effect of demand recovery. Much of this recovery has again been driven by application sectors driven by sustainability trends like solar glass, lithium carbonate and the move from plastic to glass containers. With no immediate capacity additions, operating rates have moved up to fulfil this demand. China's production will be consumed by domestic demand leading to a fall in its export. With supplies from Turkey already absorbed in Europe, North Africa, few markets in SEA and India, USA could step in to meet the global demand growth.



The Company continues to focus on driving its transformation agenda to grow businesses and products that serve customer needs along the vectors of sustainability and good health

Buoyant Indian rural demand, improving urban demand and ongoing vaccination programmes are the key positives which will play in the medium term. Although the GDP has registered growth in the third and the fourth quarter of FY 2020-21, uncertainty related to the near-term outlook has risen since April 2021, following the spate of new Covid-19 infections which have necessitated localised restrictions.

In India, recovery in soda ash demand across application sectors and an anticipated reduction in imports are likely to bring demand and supply into balance with corresponding easing of pressure on pricing. Increasing energy costs and freight costs need to be monitored as possible drags on performance, however, ongoing programmes on driving cost reductions and efficiencies are likely to yield benefits in margins.

Continuing push on growing value-added sodium bicarbonate sales into the growing food, feed and pharma sectors in line with the Company's transformation strategy and offering customers in these sectors a portfolio of products including its NQ range of prebiotics will be a focus area. This would also further ramp up capacity utilisation of the new prebiotics plant. Similarly, ongoing project to increase salt capacity in order to service long term growth in demand from the key customer, TCPL will continue. Sustainability driven trends in the rubber and tyre industry calling for incorporation of specialty grades of silica augers well for the growth of the specialty silica business in terms of customer acquisition and capacity growth.

The outlook for TCNA, USA remains positive with soda ash operating rates moving up close to normal levels driven primarily by ongoing recovery in export markets. Pricing is likely to lag demand recovery but with positive trends emerging, that would be leveraged as contracts permit. At TCNA, continuous improvement, cost reduction and sustainability in operations will remain areas of focus to drive margin improvement.

In the UK, soda ash demand, which was not significantly impacted during the pandemic, continues to remain firm. However, pricing which is primarily contractual has come under pressure from January 2021 and will persist at these levels till at least the year end. Sodium bicarbonate demand would continue to remain strong and with the commissioning of Carbon Capture and Usage (CCU) plant, as part of the Company's overall sustainability push towards net zero, the Company expects to see benefits flowing through. The salt business which was affected by the closure of the hospitality and leisure sector is likely to see normalcy return as the UK begins to ease lockdown restrictions. Both

sodium bicarbonate and salt will continue as part of the overall strategy to focus on the higher value application sectors.

For TCML, Kenya, demand recovery in export markets and a consequent revival in pricing together with a focus on the domestic East African market to maximise overall price realisation through strategic market mix would be an area of focus. In addition, ensuring plant reliability and driving down costs would continue to be key result areas.

For the crop protection sector, India is projected to be a key beneficiary of the global move towards 'China plus one' sourcing strategy of companies, which is expected to provide further momentum. Industry is collaborating with the Government in building an enabling ecosystem to make India an agrochemical powerhouse. As part of its strategy, 'Repositioning Rallis for Leadership', Rallis is focussing on investment in research and development, flexible manufacturing capacities, digital initiatives to enhance internal efficiencies and further leveraging its branding power. These initiatives will help in attracting partnerships across the value chain, including contract manufacturing.

## 6. Risk and Opportunities

The key short to medium term risk for the Company would be a slow post-pandemic price recovery in key export markets serviced by the USA and Kenya. The Company, across units, plans aggressive cost control and cash conservation measures through prudent capital expenditure spends and disciplined working capital management to counter this phase. In addition, the focus on more resilient products and markets would moderate this impact.

In India, with increasing demand, defending the Company's market position is a prime focus area. The Company will pursue the execution of its capacity addition plans at Mithapur for key products i.e. salt, soda ash and sodium bicarbonate under 'Project Pragati'.

The Company's value-driven growth opportunity in the sodium bicarbonate space with brands in food, animal feed, pharma and specialty segments will ensure scale and consolidation. Strategic partnerships around themes of innovation and sustainability will continue to offer better customer value.

Leveraging technology with an increased focus on automation and digitisation using Industrial Internet of Things (IIoT), digital twins, data analytics and satellite imaging will help the Company make its processes more robust for customers and internal efficiencies. Multiple projects around plant and supply chain automation, customer engagement and digital imaging are being implemented.

Higher energy costs and volatility in exchange rates are significant risks to the Company's business performance. The Company continues to remain focussed on keeping fixed costs low and controlling variable costs through securitisation of the key raw materials, including fuel and limestone along with continuous improvement programmes and a dynamic hedging strategy to help mitigate the adverse impact of these risks.

TCNA will ensure the continued safety of employees, while increasing reliability and stabilisation of production through debottlenecking. Cost reduction programmes will be another focus area, specifically to reduce the maintenance, material, labour and medical benefit costs. To address the environmental non-compliance risk, TCNA will be investing in technologies to reduce greenhouse gas and other emissions. It continues to investigate alternative energy sources to coal to reduce emission and energy costs. TCNA is well prepared to address the short term export risks due to the ANSAC exit in December 2022.

Adherence to more stringent environmental and regulatory norms and sustainably improving safety performance are other key issues for the business. A focus on these initiatives including investment and resource prioritisation form a mitigation strategy to systematically address them.

In the UK, there is a significant investment pipeline of projects across the Company's business particularly in high-end product growth. Developing sales opportunities overseas for sodium bicarbonate and salt will continue to be a focus. Major threats are likely to be a form of sluggish pick up in global growth by a slow exit from the pandemic, but UK's progress on vaccinations means the domestic market should strengthen considerably.

CY 2021 will also witness the introduction of the UK Emissions Trading Scheme following the UK's exit from the European Union and at this moment, how this operates, remains to be seen.

In Kenya, the focus is largely on quality and capacity utilisation. In addition to Standard Ash Magadi (SAM), opportunities exist in Crushed Refined Soda (CRS). Utilisation of lean six sigma and lean manufacturing tools and techniques, continuous process improvement and enhanced global sourcing will help reduce costs and improve efficiency. Creating a talent pool is another focus area identified by TCML for the coming year. It is working on more engagement with local and national stakeholders and supports concerted efforts, including technical collaboration with third parties, to mitigate risks affected by increased siltation in the northern part of Lake Magadi.

For Agri Sciences, climate change can disrupt operations and/or reduce demand for products. This can lead to water shortages and decrease sales. Uncertainty in timing and severity of monsoon can impact overall business. Geographic spread of business and a wide portfolio dampens the impact of climate-related issues. Rallis is focussed on developing new products to deal with climate change issues. The Seeds R&D team of Rallis is working on hybrids that address stress conditions.

Proliferation or instability in regulatory policies may lead to adverse impact on growth and profitability and increased exposure to civil and/or criminal actions leading to damages, fines with possible consequences for corporate reputation. Our endeavour is to keep track of emerging regulations, including Environmental, Social and Governance (ESG) risks. These are analysed to assess how they can impact business and mitigation plans are put in place.

## 7. Financial Performance

### (a) Standalone performance for the year ended March 31, 2021

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change	Remarks
Revenue from operations	2,999	2,920	79	3	<b>Basic Chemistry Products:</b> Lower volumes of soda ash and lower realisation was compensated by higher volumes of salt. Revenue from sale of new cement variant contributed to higher revenue for the Company.  <b>Specialty Products:</b> Due to increase in volume of products related to Nutrition Sciences and Silica.
Other income	219	309	(90)	(29)	Other income has decreased mainly on account of lower interest on investments and lower dividend income from non-current investments.
Cost of materials consumed	600	542	58	11	Cost of materials is higher due to higher input costs of raw materials and higher salt volumes.
Purchases of stock-in-trade	153	94	59	63	Purchases of stock-in-trade increased mainly on account of higher demand for Basic Chemistry Products and Nutrition Science related business.
Power & fuel	489	555	(66)	(12)	The decrease in power and fuel cost is mainly on account of decrease in price of coal and other variants.
Employee benefit expenses	250	250	-	-	Employee costs have remained constant and no change compared to FY 2019-20.
Freight and forwarding charges	423	390	33	8	Freight and forwarding charges have increased majorly due to higher sales volumes of salt, nutrition business and silica products.
Finance cost	19	43	(24)	(56)	Finance costs decreased due to repayment of External Commercial Borrowings (ECB) and Non-Convertible Debentures (NCD) in FY 2019-20.

### (b) Standalone Balance Sheet Analysis

#### i. Investments

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Investments in equity instruments in subsidiaries	3,606	3,606	-	-
Investment in joint venture	336	336	-	-
Investment in preference shares in subsidiaries	815	815	-	-
Investment in other companies	3,147	1,904	1,243	65
Investments in NCDs	150	-	150	100
Investment in mutual funds	1,282	1,301	(19)	(1)
<b>Total</b>	<b>9,336</b>	<b>7,962</b>	<b>1,374</b>	<b>17</b>

Increase in the value of investments in other companies is mainly due to changes in fair value of investments.

**ii. Inventories**

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Inventories	522	701	(179)	(26)

Inventories are lower primarily due to tighter control on working capital.

**iii. Trade Receivables**

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Trade Receivables	145	140	5	4

There is no significant change during the year.

**iv. Loans, other financial assets, advance tax assets (net) and other assets**

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Loans	1	1	-	-
Other financial assets	119	138	(19)	(14)
Advance tax assets (net)	575	589	(14)	(2)
Other assets	415	328	87	27
<b>Total</b>	<b>1,110</b>	<b>1,056</b>	<b>54</b>	<b>5</b>

Decrease in other financial assets is mainly due to realisation of subsidy receivable and lower exposure on derivatives. Increase in Other assets is mainly due to higher advances given for capital goods procurement.

**v. Cash & Cash Equivalent (net)**

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Cash and cash equivalent (including Bank balances)	685	880	(195)	(22)
<b>Borrowings</b>				
Non-current borrowings	(5)	(10)	5	50
Current maturities of non-current borrowings and finance lease obligations	(4)	(4)	-	-
<b>Total Borrowings</b>	<b>(9)</b>	<b>(14)</b>	<b>5</b>	<b>36</b>
<b>Cash and cash equivalent (Net)</b>	<b>676</b>	<b>866</b>	<b>(190)</b>	<b>(22)</b>

Borrowings decreased mainly due to repayment of lease liabilities and cash and cash equivalent have been used in investing and financing activities.

**vi. Trade payables, Other financial liabilities, other liabilities, provisions, current tax liabilities (net) and deferred tax liabilities (net)**

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Trade payables	482	575	(93)	(16)
Other financial liabilities	170	187	(17)	(9)
Other liabilities	58	57	1	2
Provisions	356	363	(7)	(2)
Current tax liabilities (net)	135	166	(31)	(19)
Deferred tax liabilities (net)	202	60	142	237
<b>Total</b>	<b>1,403</b>	<b>1,408</b>	<b>(5)</b>	<b>-</b>

Increase in deferred tax liabilities (net) is mainly due to increase in fair value of non-current investments. Decrease in trade payable is mainly due to regular payment as per terms of the business.

**(c) Standalone Cash flow analysis**

₹ in crore

Particulars	FY 2020-21	FY 2019-20
Cash from operating activities	672	427
Cash from investing activities	(403)	(293)
Cash from financing activities	(291)	(1,101)

**Net cash flow from operating activities:** Higher operating cash flows in FY 2020-21 as against FY 2019-20 is mainly on account of favourable change in working capital despite lower operating income.

**Net cash flow from investing activities:** Higher investing cash outflows in FY 2020-21 as against FY 2019-20 is mainly on account of purchase of property, plant and equipment (including capital work-in-progress) and on account of purchase of non-current investments.

**Net cash flow from financing activities:** Higher cash outflow in FY 2019-20 was mainly on account of repayment of borrowings.

**(d) Details of significant changes in key Standalone Financial ratios:**

- Interest coverage ratio** of the Company has improved to 33.8 times (FY 2019-20: 20.2 times) due to lower finance cost on account of repayment of borrowings during the previous year.



2. **Net Profit Margin (%)** of the Company has reduced to 16% (FY 2019-20: 23%) due to lower price realisation, lower other income, higher depreciation and amortisation expense and higher cost of goods sold.
3. **Return on Net Worth (%)** of the Company has reduced to 4% (FY 2019-20: 6%) due to lower price realisation, lower other income, higher depreciation and amortisation expense and higher cost of goods sold.

### (e) Consolidated performance for the year ended March 31, 2021

#### i. Revenue from operations

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Tata Chemicals Limited, India ('TCL')	2,999	2,920	79	3
TCE Group Limited, UK - consolidated ('TCE Group')	1,409	1,356	53	4
Tata Chemicals Magadi Limited, Kenya ('TCML')	413	474	(61)	(13)
Tata Chemicals North America Inc., USA - consolidated ('TCNA')	2,878	3,403	(525)	(15)
Rallis India Limited, India ('Rallis')	2,424	2,248	176	8
Others and Eliminations	77	(44)	121	275
<b>Total</b>	<b>10,200</b>	<b>10,357</b>	<b>(157)</b>	<b>(2)</b>

- a. Basic Chemistry Products: Lower volumes of soda ash from TCNA and TCML and higher volumes of salt in India, higher revenues across products in TCE Group.
- b. Specialty Products: Higher volumes at Rallis.

#### ii. Cost of materials consumed

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	600	542	58	11
TCE Group	174	181	(7)	(4)
Rallis	1,329	1,217	112	9
Others and Eliminations	(22)	(96)	74	77
<b>Total</b>	<b>2,081</b>	<b>1,844</b>	<b>237</b>	<b>13</b>

Cost of Materials consumed increased primarily at Rallis due to higher volumes and price mix. In case of TCNA and TCML, raw materials are primarily mined and do not involve external purchases and hence not reflected in cost of materials consumed.

#### iii. Purchases of stock-in-trade

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	153	94	59	63
TCE Group	1	22	(21)	(95)
TCNA	22	20	2	10
Rallis	137	141	(4)	(3)
Others and Eliminations	10	(25)	35	140
<b>Total</b>	<b>323</b>	<b>252</b>	<b>71</b>	<b>28</b>

Higher purchase of stock in trade is due to higher volumes in Nutrition Science business and soda ash imports in India.

#### iv. Power and fuel

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	489	555	(66)	(12)
TCE Group	459	415	44	11
TCML	94	98	(4)	(4)
TCNA	341	324	17	5
Rallis	54	58	(4)	(7)
<b>Total</b>	<b>1,437</b>	<b>1,450</b>	<b>(13)</b>	<b>(1)</b>

Lower costs in TCL and TCML offset by increase in TCE Group and TCNA.

#### v. Employee benefit expenses

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	250	250	-	-
TCE Group	193	183	10	5
TCML	80	88	(8)	(9)
TCNA	654	646	8	1
Rallis	216	198	18	9
Others	7	10	(3)	(30)
<b>Total</b>	<b>1,400</b>	<b>1,375</b>	<b>25</b>	<b>2</b>

Employee costs have remained largely constant and no major change compared to FY 2019-20.

#### vi. Freight and forwarding charges

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	423	390	33	8
TCE Group	140	128	12	9
TCML	76	90	(14)	(16)
TCNA	727	856	(129)	(15)
Rallis	86	78	8	10
Others	5	9	(4)	(44)
<b>Total</b>	<b>1,457</b>	<b>1,551</b>	<b>(94)</b>	<b>(6)</b>

Freight and forwarding charges have decreased primarily due to lower volumes in TCNA and TCML offset by higher salt volumes in TCL and TCE Group.

## vii. Finance costs

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	19	43	(24)	(56)
TCE Group	55	53	2	4
TCML	17	22	(5)	(23)
TCNA	201	131	70	53
Rallis	5	6	(1)	(17)
Others and Eliminations	70	87	(17)	(20)
<b>Total</b>	<b>367</b>	<b>342</b>	<b>25</b>	<b>7</b>

Higher interest costs on account of increase in TCNA and TCE Group mainly on account of one time refinance cost, partly offset by lower interest cost in TCL due to repayment of ECB and NCD in the previous year.

## viii. Other expenses

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
TCL	461	447	14	3
TCE Group	321	289	32	11
TCML	119	151	(32)	(21)
TCNA	719	808	(89)	(11)
Rallis	347	329	18	5
Others and Eliminations	41	38	3	8
<b>Total</b>	<b>2,008</b>	<b>2,062</b>	<b>(54)</b>	<b>(3)</b>

## Other expenses represent the following

₹ in crore

Particulars	FY 2020-21	FY 2019-20	Change	% Change
Stores and spares consumed	279	258	21	8
Packing materials consumed	227	196	31	16
Repairs	421	445	(24)	(5)
Rent	52	59	(7)	(12)
Royalty, rates and taxes	283	340	(57)	(17)
Distributor's service charges and sales promotion	84	91	(7)	(8)
Others*	662	673	(11)	(2)
<b>Total</b>	<b>2,008</b>	<b>2,062</b>	<b>(54)</b>	<b>(3)</b>

\*Others include insurance charges, Distributor's service charges, professional fees, foreign exchange loss, travelling expense, provision for doubtful debts and advances, directors' fees/commission, subcontracting cost, outsourcing cost and other expenses.

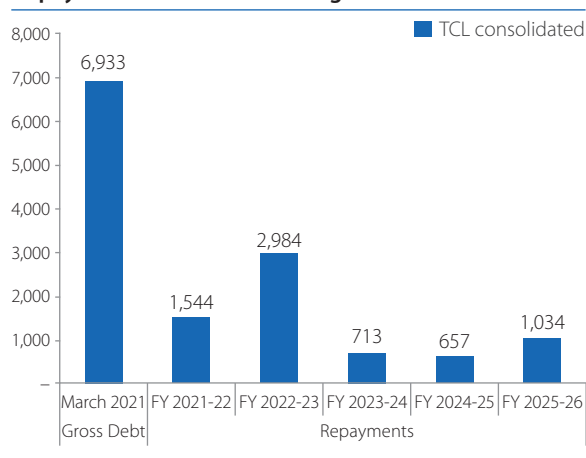
## (f) Details of significant changes in key Consolidated Financial ratios:

- Interest coverage ratio** of the group has been reduced to 2.7 times (FY 2019-20: 4.7 times) due to lower-earning during the current year compared to the previous year.
- Current ratio of the group** has been improved to 1.5 times (FY 2019-20: 1.1 times) mainly due to refinancing of loan which has moved from current to non-current in FY 2020-21.
- Net Profit Margin (%)** of the Company has reduced to 4.3% (FY 2019-20: 9.9%) due to higher cost of goods sold, lower other income, higher depreciation and amortisation expense.
- Return on Net Worth (%)** of the Company has reduced to 3.0% (FY 2019-20: 7.1%) due to higher cost of goods sold, lower other income, higher depreciation and amortisation expense.

## (g) Total Debt and Amortisation Schedule

## Repayment schedule of existing debt

₹ in crore



## Notes:

- Gross debt of ₹ 6,933 crore includes ₹ 278 crore of working capital loans/current borrowings.
- The repayment schedule for term loans has been prepared considering the existing repayment terms. Some of these loans/facilities may be refinanced, in full or in part, from time to time in future depending on the requirement and the business plans. Non-current portion of finance leases has been included in FY 2022-23 repayment.
- The repayments falling due after FY 2025-26 aggregate to ₹ 1 crore.

## 8. Innovation and Technology

### Innovation Centre

The Innovation Centre ('IC') at Pune is the Company's science and technology hub for seeding new businesses and accelerating the Company's businesses. IC supports the Company's businesses by providing cutting-edge technology solutions and a customer-centric, multi-disciplinary problem-solving approach for sustainable differentiation. The Company has filed a total of 129 patents, out of which 45 have been granted till date. In FY 2020-21, IC published 4 research papers in international peer-reviewed journals.

During the year, IC significantly supported Nutrition Sciences division by building expertise in fermentation technology for the prebiotics. Its Performance Materials division developed customised grades of Silica for rubber and garment applications. The Company won the prestigious CSIR Diamond Jubilee Technology Award 2019 for technological innovation in prebiotics and the ICC Acharya P. C. Ray Award for Development of Indigenous Technology under Performance Materials division. The Company was recognised amongst India's top 25 Most Innovative Companies in 2020 by CII for the second time in a row.

## 9. Digitalisation and Information Technology

The Company is on the Industry 4.0 journey where businesses are increasingly adopting digital technologies. It has realigned its internal teams, re-baselined the IT Strategy and Digital Transformation roadmap with an enterprise focus. The IT and Digital function has played a major role in tackling the challenges of Covid-19. It enabled secure and productive work from home options for employees, provided seamless remote operations of key systems and transactions, provided market intelligence and sales dashboards.

The Company embarked on many transformational initiatives such as Transportation Management System (TMS) for Mithapur and Rallis' Crop Care and Seeds division, HRMS and payroll on a new modern platform for the Company, Laboratory Information Management System (LIMS) for IC Pune (R&D), Rallis QA Labs and RICH, SAP Implementation

for Rallis' Seeds division, Sales Force Automation and Dealer Management System implementation for Rallis, Rebate Management System automation.

Various advanced analytics initiatives are being leveraged for improved insight and productivity gains such as the Driшти platform for monitoring over 6,000 acres of Seed production, remote sensing technology for salt pans to remotely handle operations and predict salt production, Market Intelligence Dashboard – Sales and Marketing, Covid-19 impact analysis dashboard, Global Safety Analytics project on text mining and pattern recognition, Hybrid Advance Trails analytics for Seeds division.

IIoT was utilised in the implementation of Boiler efficiency and Carbonation Tower applications with further applications being developed. Steps have been taken towards implementing a common Enterprise Resource Planning (ERP) system across all Group companies, including Customer Relationship Management (CRM) and Distributor Management System (DMS) modules in the Basic Chemistry business.

Information security is a critical function and TCL continually strengthens it through the implementation of relevant solutions, processes and training employees. The Company has signed up a competitive third party to manage, monitor and improve the overall cyber-security posture of the organisation. It is also focussing on strengthening its core IT for availability, reliability, security of the information assets and optimising the costs in the current economic situation.

## 10. Human Resources

FY 2020-21 started as the Company was completing post-closing activities related to the exit of the Consumer Products business. Safety of employees, contract/migrant labour, their families and the community around us, medical care and supply of essentials were some of the immediate concerns of the Company. A slew of initiatives such as work-from-home, workplace protocols at factories, advisories educating employees, regular team meets, remote mentoring, adoption of digital processes and online capability building was launched to keep employees engaged and productive.



The Company won the prestigious CSIR Diamond Jubilee Technology Award 2019 for technological innovation in prebiotics and the ICC Acharya P. C. Ray Award for Development of Indigenous Technology under Performance Materials division

In line with its commitment to increase diversity in the workforce, the Company has increased the hiring of women across its plants at Cuddalore, Tamil Nadu, Mambattu, Andhra Pradesh and Mithapur, Gujarat. The new batch of Graduate Engineer Trainees (GETs) that was absorbed during the year on completion of their training stint had the largest proportion of women engineers ever in any batch so far.

Covid-19 has not only reinforced the importance of up-skilling and reskilling, but it has also accelerated the adoption of digital learning solutions to make this happen. Plants continued their functional capability programmes supplemented with the centrally-run virtual training on POSH, ABAC, Ethics, D&I, etc. The pandemic reprioritised the drivers of employee engagement in FY 2020-21. Employee well-being, employee connect & communication attained high importance. Frequent communication by leaders and team meetings, advisories and policy/process changes were in place to overcome the operational issues.

In July 2020, the Company launched 'We Care', an umbrella of wellness programmes providing psychological, physical, emotional and financial wellness to help employees cope with these stressful times. The well-being of every employee was monitored with assistance provided as necessary. At Mithapur, the Workmen Union provided support and worked closely with the Management in implementing steps necessary to combat the virus and help deploy control and relief measures on the ground.

Its digital transformation journey continues under the OTON (One Tata One Network) program as a part of its migration to a new cloud-based portal to be completed in CY 2021. The migration will increase the efficiency of the people processes that are being designed keeping the needs and aspirations of our emerging multigenerational workforce in mind.

The details of number of employees as on March 31, 2021 are given on page no. 41 of this Integrated Annual Report.

## 11. Safety and Health

Driven by 'Target Zero Harm' – Zero Harm to People, Zero Harm to Asset and Zero Harm to Environment – Health and Safety, forms one of the core values at the Company.

There is an unwavering commitment to the continuous improvement of the organisation's safety performance.

The Company is committed to continuously employing world-class Safety, Health and Environment ('SHE') practices through benchmarking with the companies that are best in the business. The Company has a Board level Safety, Health, Environment and Sustainability ('SHES') Committee, chaired by a Non-Executive Director. This Committee provides valuable direction and guidance to the Management to ensure that Safety and Sustainability implications are duly addressed in all-new strategic initiatives, budgets, audit actions and improvement plans.

The Company's Corporate SHE policy is the overarching policy, with the subsidiaries fine-tuning it to align with the local regulatory and safety directorates, as per their location and legal jurisdiction. To ensure steady improvement in the SHE performance, the Company is adopting voluntary standards such as Process Safety and Risk Management (PSRM), ISO 45001, Responsible Care and the British Safety Council guidelines. The Company's commitment towards its safety management programmes follows a top-down approach, with the senior management persistently working towards establishing, demonstrating, sustaining and improving the safety culture and incorporating the Company's core value of safety in their daily responsibilities. The employees are specially trained to tackle any potential hazards that may arise in the course of their work. Additionally, tailored periodic medical check-ups are administered to the Company's employees, based on the risk profile of their work area, to identify risks to human health. Adequate medical facilities are present at all manufacturing sites and specialised medical facilities are provided through tie-ups with other hospitals, nursing homes, etc.

The Progressive Safety Index ('PSI') was launched in FY 2020-21 to provide a renewed focus on health and safety performance by tracking a group of identified lead indicators. It is designed to help in the sustenance of the identified strategies, initiatives and processes to control safety risks and overall performance. The elements of PSI have been selected through prevalent legislative requirements of the respective locations as well as the world-class frameworks for Safety Management Systems like ISO 45001, HSG 65, etc.



In July 2020, the Company launched 'We Care', an umbrella of wellness programmes providing psychological, physical, emotional and financial wellness to help employees cope with these stressful times

To assist individual units, the Company is working on digitisation and data analytics to forecast key vulnerable areas. Over the past 11 years, the Company has reduced its Recordable Injury Frequency rate by 69%. In supply chain safety, the Company's safety requirements are communicated to third parties. Periodic audits are conducted and the Company is handholding the third parties to improve their safety practices and align their performance to the Company's Target Zero Harm.

At Rallis, a culture of safety is encouraged across hierarchies by promoting behaviour-based safety, process safety and road safety as key focus areas among its workforce. To further strengthen Process Safety Management, a gap assessment has been carried out at three technical manufacturing units last year. With the help of an external competent agency, PSRM implementation started at the Dahej unit. To enhance electrical safety, different electrical studies were done by an agency in all four units. Work Safe Online (WSO), the e-portal, has also been implemented to record safety performance and take action on deviations. Rallis is taking various measures to further strengthen its process safety through enhancing automation in chemical processes and unit operations. All units re-emphasised on daily behaviour safety observation rounds with 100% coverage and associate employees.

## 12. Sustainability

At the Company, sustainability is aligned with the UN Sustainable Development Goals. It works towards 'inclusive growth' to achieve a robust triple bottom line encompassing economic, social and environmental aspects.

Aligned to the Tata Group's Sustainability Policy, the Company's sustainability policy encompasses actions towards responsible manufacturing, supporting climate change mitigation and adaptation, circular economy, biodiversity conservation and being a neighbour of choice for its key communities. It has adopted an innovative business approach to balance social, environmental and economic gain by embedding sustainability in the respective businesses' strategy. Key sustainability indicators monitored by the Company regularly include the internally developed tools - Responsible Manufacturing Index (RMI) and the Sustainability Assessment Framework (SAF).

Efficient energy and waste management, zero groundwater withdrawal for plant operations, emphasis on recycling of water, recyclable packaging, commitment towards Extended Producer's Responsibility (EPR), plastic waste consumption in

cement kiln as a fuel, reuse/recycling of solid waste, 100% fly ash utilisation, solid waste filtration, use of soda ash solids to minimise solid waste, watershed, natural capital, waste composting, biodiversity conservation measures, drinking water for the community are some of the sustainability measures that are followed.

TCL uses frameworks such as ISO 14001, OHSAS 18001, Global Reporting Initiative ('GRI'), Carbon Disclosure Project ('CDP'), International Integrated Reporting Council ('IIRC'), United Nations Global Compact ('UNGC'), SBTi, India Business & Biodiversity Initiative (IBBI) reporting, etc. to share its performance with stakeholders. This allows the Company to get feedback from the stakeholders and engage with the key customers under supply chain programmes.

## Integrated Report

The Company has adopted IIRC framework to establish integrated reporting within the mainstream business. In accordance with the IIRC Framework, the Company has included an Integrated Report <IR> as part of this Annual Report. The <IR> seeks to provide a concise and integrated account of how the Company's Strategy, Governance, Performance and Prospects are delivering on its core purpose – being a global company. The <IR> encompasses all key non-financial performance indicators which are material to the Company as per GRI, UNGC and CDP. It plays a crucial role in establishing the linkages between environmental and social sustainability as well as the financial growth of the organisation. The <IR> contains assured sustainability data for FY 2020-21 for entities across the enterprise. All additional information from all geographies, not covered under the <IR>, will also be available in the public domain shortly and can be viewed in the Sustainability section of the Company's website at [www.tatachemicals.com](http://www.tatachemicals.com).

## 13. Business Excellence

The Company remains committed to continually raising the bar on performance in all aspects of its business. The Tata Business Excellence Model ('TBEM') serves as a pivotal framework that allows the Company to gain insights into its performance and establish continuous improvement initiatives for attaining superior business results and maximising satisfaction and value to the customers. The TBEM framework comprises six core areas of business excellence: Leadership, Strategic Planning, Customer Focus, Analysis and Knowledge Management, Workforce Focus

and Process Management. For the Company, a global organisation that has its manufacturing operations spread across four continents, with diverse business segments and employees from different cultures, TBEM serves as a platform to establish a common standard of excellence. The Company participated in the Tata Group level TBEM assessments in 2019, which provided valuable inputs into the strengths and areas of focus for the Company. This helps the Company to strengthen the culture of excellence and progress towards becoming a world-class organisation.

### 14. Internal Controls

The Company has an independent Internal Audit function with a well-established risk management framework. The scope and authority of the Internal Audit function are derived from the Internal Audit Charter approved by the Audit Committee. The Company has engaged a reputable external firm to support the Internal Audit function for carrying out the Internal Audit reviews.

Reviews are conducted on an ongoing basis, based on a comprehensive risk-based audit plan, which is approved by the Audit Committee at the beginning of each year. Considering the Covid-19 challenges, the internal audit plan was refreshed to cover and focus on emerging risks in the area of cyber security, business continuity, stress testing of processes prone to fraud, etc. Considering the new normal, the reviews were conducted remotely leveraging on technology.

The Audit Committee meets every quarter to review and discuss the various Internal Audit reports and follow up action plans of past significant audit issues and compliance with the audit plan. The Chairperson of the Audit Committee has periodic one-on-one meetings with the Internal Auditor & Controller – Risk to discuss any key concerns.

### 15. Risk Management Framework

The following section discusses various dimensions of the Company's ERM system. The risk-related information outlined in this section is not exhaustive and is for information purposes only. The discussion may contain statements that may be forward-looking in nature.

The Company's business model is subject to uncertainties that may cause actual results to differ materially from those reflected in any forward-looking statements.

### Overview

The Company has a well-defined Enterprise Risk Management ('ERM') framework in place. The ERM framework has matured over several years. It is founded on sound organisation design principles and is enabled by an effective review mechanism.

Risks are identified proactively considering a balanced 'bottom-up' and 'top-down' approach considering inputs from exogenous as well as internal factors. Risk mitigation plans are devised to mitigate the identified risks. Mitigation plans with identified owners are set against target dates and the progress of mitigation actions are monitored and reviewed.

The ERM process framework is based on international standards including ISO 31000 and the Committee of Sponsoring Organisations of the Treadway Commission, with inputs drawn from the best practices of leading companies across industries but tailored to suit the Company's business needs. Risk Management and Internal Audit functions complement each other at the Company. The Company developed a resilient and adaptive Risk Management strategy to address the unprecedented Covid-19 scenario.

### Risk Management: Governance Structure

The Company has constituted a robust governance structure consisting of 5 levels thereby ensuring both bottom-up and top-down approaches.

It constituted the Risk Management Committee ('RMC') to oversee the risk efforts in the Company. The RMC meets quarterly to review key risks and assess the status of mitigation measures. The Company's approach to risk management is designed to provide reasonable assurance that its assets are safeguarded; the risks facing the business are being assessed and mitigated.

The risk management framework is described below:





The key roles and responsibilities regarding risk management in the Company are summarised as follows:

<b>1. Board of Directors</b>
Reviewing and guiding risk policy of the Company
Ensuring the integrity of the systems for risk management
<b>2. Risk Management Committee of the Board</b>
Overseeing the Company's risk management process and controls
Setting strategic plans and objectives for risk management, risk philosophy and risk minimisation
Reviewing compliance with policies implemented by the Company
Reviewing risk assessment of the Company periodically and exercising oversight of various risks including Strategic Risk, Operational Risk, Financial Risk, Regulatory Risk, Cyber Security Risk, etc.
Oversight of the Company's risk tolerance and risk appetite
Report and update to the Board periodically on various matters it has considered
Reviewing and analysing risk exposure related to specific issues, concentrations and limit excesses and provide oversight of risk across the organisation
<b>3. Risk Management Group at Senior Leadership Level</b>
Identification and review of enterprise risks from time to time, initiating mitigation actions, identifying owners and reviewing progress

Identification and review of risk appetite and risk trigger (at Enterprise Level)
Implementation of Risk reduction strategies
Formulating and deploying Risk Management Policy
Deploying practices for identification, assessment, monitoring, mitigation and reporting of risks
Providing updates to RMC from time to time on the enterprise risks and actions taken
<b>4. Risk Management Group at Business Unit (BU) Level/ Subsidiary Level</b>
Reviewing respective BU/Subsidiary risks from time to time, initiating mitigation actions, identifying owners and reviewing progress
Identification and review of risk appetite and risk trigger (at BU/Subsidiary Level)
Implementation of risk reduction strategies
Deploying Risk Management Policy
Deploying practices for identification, assessment, monitoring, mitigation and reporting of risks
Providing updates to RMG and RMC level from time to time on the respective SBU risks and actions taken
<b>5. Risk Owners</b>
Responsible for developing and acting on the risk mitigation plan
Providing periodic updates to RMC on risks with the mitigation plan

### Risk Categories

The following categories of risks have been considered in the Risk Management Framework:



- Strategic Risks** includes the range of external events and trends (like Government policy) that can adversely impact the Company's strategic growth trajectory and destroy stakeholder value. It also includes the risks arising out of the choices the Company has made in defining its strategy.
- Reputational Risks** includes a range of events that creates a mismatch between stakeholders' expectations and their perceptions of the Company's performance around those expectations.

- **Operational Risks** are those risks that are associated with operational uncertainties including failure in critical equipment, attrition, loss of data from cyber-attacks, etc.
- **Regulatory and Compliance Risks** are risks on account of inadequate compliance of regulations, contractual obligations and intellectual property violations leading to litigation and loss of reputation.
- **Financial Risks** are risks faced by the organisation in terms of internal systems, planning and reporting.

### Cautionary Statement

*Statements in the Management Discussion and Analysis describing the objectives, projections, estimates and expectations of the Company, its direct and indirect subsidiaries and its associates, may be 'forward-looking statements' within the meaning of applicable laws and regulations. Actual results might differ substantially or materially from those expressed or implied. Important factors that could make a difference to the Company's operations include, among others, economic conditions affecting demand/supply, price conditions in the domestic and overseas markets in which the Company operates, changes in the Government regulations, tax laws and other statutes and incidental factors.*