MANAGEMENT DISCUSSION AND ANALYSIS

1.0 Indian Economic Scenario:

The economy of India is characterised as a developing market economy. It is the world's fifth-largest economy by nominal GDP and the third-largest by purchasing power parity (PPP). Since the start of the 21st century, annual average GDP growth has been 6% to 7% and from 2014 to 2018, India was the world's fastest growing major economy, surpassing China. The long-term growth perspective of the Indian economy remains positive due to its young population and corresponding low dependency ratio, healthy savings and investment rates and is increasing integration into the global economy.

2.0 Overview of Company:

Gujarat Narmada Valley Fertilizers and Chemicals Limited ('the Company' or 'GNFC') operates businesses mainly in the Industrial Chemicals, Fertilizers and Information Technology ('IT') Products space. Company has been consistent in utilising its existing production capacities and extracting better out of available productive capacities.

Under the fertilizers business, company sells under the brand name of "NARMADA" known in the market as Narmada Urea as part of straight fertilizer and Narmada Phos (20:20:0:0) as part of phosphatic fertilizer.

Fertilizer is more or less a controlled and working capital intensive business. In this business, currently company has no plans of expansion. The subsidy part consists of major portion of working capital. Being cash rich, the cost of working capital does not directly reflect in fertilizer segment however going by major working capital investment components it has significant working capital interest impact. As can be seen from trade receivables, there is a significant portion of working capital blocked in subsidy receivables. This is in view of the GAAP and/ or reporting limitations.

Over the years, company has set up various fertilizer/chemical plants as under :

Product	Operational Year	Rated Capacity MTPA	Production MTPA	Remarks
Ammonia	1982	4,45,500	2,91,299	
Urea	1982	6,36,900	8,29,656	
Methanol - I	1985	50,000	3,307	
Formic Acid	1989	10,000	22,547	Revamped in 2004-05
Methanol-II	1991	1,88,100	1,20,516	Revamped in 2008
Concentrated Nitric Acid-I	1991	33,000	33,948	
Weak Nitric Acid-I	1991	2,47,500	3,10,003	Revamped in 1999
Ammonium Nitro Phosphate	1991	1,42,500	1,94,270	
Calcium Ammonium Nitrate	1991	1,42,500	Nil	The plant operation stopped since 2014 due to AN rules
Aniline	1995	35,000	26,886	Both plant installed by a separate JV company NCPL
Toluene Di-Isocyanate	1998	14,000	19,519	
Acetic Acid	1995	1,00,000	1,66,665	Revamped in 2002
Syn Gas Generation unit	1998	2,01,960 KNm3	15,545 KNm3	
Concentrated Nitric Acid-II	1999	33,000	34,548	
Methanol Synthesis Unit	2006	30,600	Nil	
Concentrated nitric acid-III	2011	50,000	54,016	
Weak nitric acid - II	2011	1,00,000	1,31,122	
Co-generation Power & Steam Unit	2012	2,84,515	2,98,984	
Ethyl Acetate Plant	2012	50,000	61,569	
Ammonia Syngas Generation Plant	2013	Equivalent 3,69,600 MTPA Ammonia	3,97,268	
Toluene Di-Isocyanate - II	2014	50,000	40,712	

As it is evident from the above that gradual debottlenecking / revamping has resulted in achieving higher than rated capacities. This year in spite of improved volumes of chemical products, the revenue of chemical products have been depressed having an impact of Rs. 945 corers and hence to that extend the profitablity. Most of company's products are competing with big multinational players at import parity. Since India is net importer of oil and gas and this being primary feed/fuel for company, its financial performance is dependent upon how these variable play out.

Although in chemicals, as can be seen from the above table, company is in few cases the only manufacturer due to stiff import competition, it does provide some premium in realisation however it has to compete fiercely when it comes to basic pricing.

In spite of headwinds in chemicals, due to reasonable cash flow as well as profitability of chemical business over last 2-3 years, company has become long term and short term debt free lending credibility to its financial strength.

(n)Code Solutions - IT Division of the company, provides several value-added IT services and solutions covering System Integration, Smart Cities Implementation, e-Auction, e-Procurement and Education Domain, e-Governance Projects, Data Centre's/Cloud services, CCTV Surveillance Systems, etc. The DSC and Smart Cities Projects business witnessed headwinds during the period and company is repositioning itself with a view to have better market share in DSC business. After evaluating the strength and weaknesses, it has decided to defocus from big smart city projects and rather pay attention to profit making, quick cash conversion businesses like software, DSC, e-procurement etc.

3.0 Industry Structure and Development:

3.1 Fertilizer Business:

Indian fertilizers industry's main objective is to ensure the supply of primary and secondary nutrients in the required quantities. The Indian fertilizer industry is the most energy intensive sector in the context of environmental discussion. Since Fertilizer Industry is highly regulated and monitored by Government of India (GoI), it continues to face some serious challenges in the form of - (i) availability and fluctuating prices of raw material required to produce fertilizers;(ii) heavy imports and lack of adequate domestic production capacity; (iii) lack of long term and stable Government Policy and (iv) increasing demand of speciality Fertilizers.

The total fertilizer market in India can be understood as under :

(MTs in Lakhs)

Fertilizer	Production		Imports		Total		Consumption	
	Quantity	%	Quantity	%	Quantity	%	Quantity	%
Urea(46% N)	239	76	75	24	314	100	314	100
Ammonium Sulphate(20.6%N)	7	90	1	10	8	100	6	75
SSP	41	100	-	-	41	100	36	88
Ammonium Phosphate Sulphate	37	99	-	-	37	100	39	100
Ammonium Nitro phosphate (ANP)	2	100	-	-	2	100		
DAP	39	37	66	63	105	100	92	88
NP/NPK(Other than APS-ANP-DAP-MAP)	50	91	5	9	56	100	51	91
MOP, SOP & etc.	1	1	43	99	43	100	30	70
Total	**416**	**69**	**190**	**31**	**606**	**100**	**568**	**94**

The Direct Benefit Transfer (DBT) scheme for fertilizers has been implemented throughout the country from March 2018. Though the scheme is called DBT, subsidy continues to be routed through the industry. This scheme has changed the business model for fertilizers companies. Subsidy under the scheme becomes due only on sale of fertilizers by the retailers to the farmers through POS (Point of Sales) machines.

Earlier 90 % and 95% of the subsidy amount of Nitro phosphate and Urea respectively was getting paid on receipt of fertilizers at the field warehouse / retailers. This has postponed the payment of subsidy by about of six months as per the report of Fertilizer Association of India. This is because dispatches are continuous during the year but sales of fertilizers are seasonal. Hence, DBT has further increased the requirement of working capital in general.

It will still take some more time to roll out DBT in its original form where the intended benefit reaches the end consumer i.e. farmer without involving Industry. The implementation in its current form has brought more transparency but at the same time blocked more capital of business units in Industry.

Sales of fertilizers have increased in the country during 2019-20 as compared to last year. This is primarily because of the best monsoon in 25 years during 2019 and continued good rainfall even after the normal monsoon period, which traditionally ends by 30th September.

3.2 Chemical Business:

India is the 5th largest economy of the world and the 6th largest producer of chemicals globally contributing to 3.5% of the global chemical industry (2018-19). The country ranks third globally in the production of agro chemicals and contributes around 16 per cent to the global dyestuff and dye intermediates production. Basic chemicals and their related products constitute a significant part of the Indian economy. Among the most diversified industrial sectors, chemicals cover an array of more than 70,000 commercial products.

In the past few years, a strong reform driven approach by the Government of India has further bolstered economic progress. The government has taken several key initiatives to enhance Ease of Doing Business including Make in India (to boost investment), various export incentive schemes, Government e-Marketplace to boost procurement. Introduction of the landmark Goods & Services Tax promises a transformational impact in economic growth. Start-up India has adopted an institutionalised approach to promoting new enterprise in collaboration with all stakeholders, and this promises to play a disruptive role across sectors of the economy in the coming years. Meanwhile, the country is making great strides as an investment destination as well as a prominent exporter across a number of sectors, including automotive, IT, engineering, food processing, chemicals, renewable energy, pharma and healthcare, services, telecom, textiles, etc.

It is imperative to mention that COVID-19 pandemic will have cascading adverse effects on all the business worldwide with no exception to the chemical industry, wherein prices of chemicals were already seeing a downward pressure since 2018-19. As the starting raw material of majority of chemicals is petroleum products, the weakening of chemical product prices will be largely compensated. The Indian government is actively monitoring the situation and taking all the necessary steps to bring the Indian business on track.

With consistent high rates of economic growth in the past and enormous potential, the Indian economy has truly taken global centre-stage. By integrating "Assemble in India for the world" into Make in India, India is all set to raise its export market share to about 3.5 per cent by 2025 and 6 per cent by 2030. In India, chemical industry is expected to follow an accelerated growth path and is expected to double up its global share in the next decade.

3.3 Information Technology (IT)Business& Others:

On the business side, companies are dependent on innovations coming out of the technology sector to create their enterprise software, manage their logistics systems, protect their databases, and generally provide the critical information and services that allow companies to make strategic business decisions.

(n)Code has built a niche over period of time in PKI/DSC, n-Procurement, e-Auction, Mining, e-Governance, Data centre management, Management of Citizens Primary Health, ERP's, CCTV and related infrastructure management for Citizen security with law and order enforcement in the area and specific Bespoke/customized software development to fit specific needs of our elite clients. (n)Code has also ventured into Smart cities as system integrators and proudly supports "Easy of doing Business" initiative of GOI in all forms. All is being delivered with appropriate technology being deployed which is fit for purpose. (n)Code continues to march forward guided by its vision to be a preferred technology provider enabling businesses to achieve growth.

Others: It includes Neem based niche products, inter-alia every niche has segments of society creating demands. Company is evaluating its positioning in Neem based products accordingly for providing pristine value for money.

During the year Neo Neem Brand, with new design and packaging, was launched on 14th December, 2019.Batch production formula of various products such as Neem Soap, Neem Hand wash and Neem Shampoo are modified in view of customer feedback and as a process of continuous improvement apart from launching Neem based new variant of pesticides.

Organic certification of Neem oil based products was obtained from M/s. Biocert International Pvt. Ltd. as our products are meeting with Biocert Organic Standards. The company also possesses the certification from M/s. Biocert regarding usage of highest percentage of virgin Neem oil in Neo Neem Soap in the country.

4.0 Overview of Performance:

4.1 Chemical & Fertilizers:

(a) Production/ Operational Performance:

The Company has achieved excellent production performance during the year 2019-20 with higher efficiency well executed strategies around input sourcing and marketing. Most of the plants of the Company were operated at over 100% capacity utilization. Day to day plant operations were closely reviewed and plant load adjusted accordingly, to maximize profit. Special focus was given on energy conservation and cost reduction in all aspects.

The Company achieved remarkable production performance during FY 2019-20 with ever highest yearly production achieved of Ammonia, Technical Grade Urea, Total Urea, Methyl Format, Formic Acid, Acetic Acid, AN Melt, Weak Nitric Acid-I/II, TDI-I, Bharuch.

GNFC Bharuch complex is ISO-14001 and ISO 45001 certified from M/s. TUV. TDI Bharuch plant is ISO 9001:2015 certified from M/s. Bureau of Veritas India Ltd. TDI-II Dahej complex is ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 & ISO 50001:2018 certified.

Awards won during the year 2019-20:

1) GNFC received 4th Rank in Environmental Green rating of Indian Fertilizer industry under its Green Rating Project (GRP). Environment Minister Shri Prakash Javadekar gave the Awards.

2) The Company participated in 16th National Awards for Excellence in Cost Management 2018 arranged by Institute of Cost Accountants of India and the Company got the Third Position in Category of Manufacturing - Public sector - Mega Unit.

(b) Sales Performance:

The Company performed reasonably well in the Fertilizers business during FY 2019-20. The Company sold of 863 Lakhs MTs of fertilizers as compared to 849 Lakhs MTs in previous year. Company continued the Trading activities of Fertilizers like Muriate of Potash (MOP), Di-Ammonium Phosphate (DAP), Ammonium Sulphate (AS), Single Super Phosphate (SSP) and City Compost were traded during the year. 16,107 MT Fertilizers were sold as part of trading activities.

The Fertilizer industry remains vital to agriculture productivity but continues to operate under a rigid control regime.

Chemical business has positively contributed to the profitability of the company despite majority of chemicals witnessing a downward pricing trend in international as well as domestic markets.

Overall TDI market sentiment remained unfavorable during the whole year reflecting oversupply situation as witnessed since July-18. TDI prices in international market also remained at bottom. Dumping of imports affected the viability of TDI-2 operations.

The company is one of the largest producers of industrial chemicals in India, with TDI, Acetic Acid, and Formic Acid being its core products. The company is the only manufacturer of Toluene Di Isocyanate (TDI) in South-East Asia. The company has so far exported its products to more than 80 countries worldwide.

"Neem Project" is a success story for creating shared value among the rural and urban poor and empowering communities with targeted focus on women empowerment through income generation and improved livelihoods.

During the year 2019-20 also, Company continued collection of Neem seeds. Around 4,300 MT Neem seeds were collected during the year. To encourage Organic farming, Company produced and sold 850 MT Neem Manure, 1,628 MT De-Oiled Cake and 63,868 Litres of Neem Pesticides during 2019-20.

(c) Financial Performance:

The Financial Highlights for year 2019-20 is as under: **(Rs in Crores)**

Particulars	2019-20	2018-19	Growth
Revenue from Operations	5162	5,896	0
Profit before Tax (PBT)	425	819	48%
Profit After Tax (PAT)	499	741	33%
EBITDA	694	1,089	36%
Export Revenue	302	437	31%
Book Value per Share (Rs.)	336	322	100%
Earnings per Share (EPS) (Rs.)	32.10	47.69	33%

Comments will be added based on the financial amounts of FY 2019-20.

5.0 Outlook:

5.1 Procurement of Raw materials :

The company has established system of buying its feedstock, raw materials and other inputs at competitive prices. The key inputs directly used in production are natural gas, oil, toluene, benzene, special denatured spirit (SDS) and rock phosphate whereas coal is used as an indirect input mainly for utilities like power and steam apart from natural gas primarily.

As far as possible and in line with the directives of Risk Management Committee, more than one sources of supply are encouraged as an operating philosophy. This lends credibility to its operations in terms of competitive pricing and reliability in supply.

5.2 Fertilizers Business:

The Company is confident of performing well in the Fertilizers business with its strong brand image and an excellent marketing network.

5.3 Chemicals Business:

The country's strong growth will be hampered to some extent due to COVID-19 pandemic. However as far as the company is concerned, it will maintain its leadership position in Formic Acid, Acetic Acid, Aniline and TDI as the company is a frontline producer of these basic chemicals in India. Majority of the Chemicals produced by the company constitute key inputs for various sectors. As majority of the chemicals in the product basket of the company comprises of import substitute and key input chemicals, the growth outlook of company's chemical business is positive.

Overall TDI market sentiment remained negative during second half of the year. TDI prices in international market also remained at bottom as well as import dumping affecting viability of TDI-2 operations.

The performance of the Bharuch and Dahej units of the Company is improving year by year due to continuous emphasis on higher productivity, energy conservation and efficiency improvement, innovation / cost reduction.

Domestic market leadership position is maintained in Formic Acid, Acetic Acid, Aniline and TDI and Methanol.

5.4 Information Technology (IT) Business and Others:

With economic, Socio-political scenario in India, the services provided by (n)Code would be further appreciated based on our previous history of transparency and dedication to deliver "fit for use" solutions.

Company will continue to procure Neem Seeds this year also. Neem De-oiled Cake, Neem Manure and Neem Pesticides have been received well by the farmers and are doing well.

6.0 Opportunities and Strengths:

1. In chemical segment, to cater to demand growth, profitable opportunities are being explored in different chemicals.
2. Company has entered into Long Term / Annual Contracts / Agreements for supplies of most of the critical Raw Materials like Coal, FOHV, Rock Phosphate, Packaging Materials etc. which are essential for continuous production.
3. For IT industry, strengthen our e-Governance capabilities to support ever evolving client requirements, opportunities are explored in newer areas with better governance, explore more software business and Implement processes for effective delivery to improve customer satisfaction and employee satisfaction.

7.0 Threats, Risks & Concerns:

1. Key raw materials and feedstock are purchased at import parity price and its availability from one supplier is also a major concern. Company is tying up with alternative second source of raw material while addressing the concerns of quality so as to ensure operational efficiency.
2. Availability challenges especially in respect of desired quality of Oil mainly and to a lesser extent other materials
3. Recruitment and retention of talented human resources is a matter of concern at the same time developing adequate senior level hierarchy in coming one year is also a big concern.
4. With a push for Digital India, there is a lot of pressure to manage data against ever evolving statutory guidelines by various agencies under GOI.
5. Intellectual property violations and impersonation is taken seriously as they erode the credibility of organization in industry.

8.0 Risk Management:

The company has in place a Risk Management Policy. Under this Policy, various risks pertaining to operations & maintenance of plants, financial and other organizational risks are assessed, evaluated and continuously monitored for taking effective steps for its mitigation.

Risk Management Report, inter-alia, containing major anxiety areas of risks and action plan for their mitigation and noteworthy risk management activities carried out by the company is put-up before the Audit Committee and Board of Directors Meetings periodically for its review.

9.0 On-going projects / New projects/ Revamp schemes :

GNFC is continuously looking for the growth opportunities and has initiated actions for implementation of various projects as under:

1. Formic Acid:

Company is implementing Formic Acid (FA) capacity enhancement project to increase the capacity by 20 MTD (6,800 MT per annum). The project will be completed by Q2 2021-22 and total capacity of FA would be 85 MTD.

2. Concentrated Nitric Acid (CNA):

With increase in captive consumption of CNA for TDI, market share of GNFC is reducing. Hence, Company is implementing 4th CNA plant with a capacity of 150 MTD. The project will be completed by Q2 2021-22.

3. Solar Power:

To fulfil Renewable Purchase Obligation, 10 MW Solar Power Project at Charanka Solar Park is under implementation. The Project will be completed by Q-2of 2020-21.

4. Ammonia Plant revamp:

It is possible to increase the Ammonia production capacity from 1,900 MTPD to 2,050 MTPD by installation of Ammonia Make-up Gas Convertor Loop, in existing Ammonia Synthesis loop. This will increase Ammonia production by 50,000 MT per annum. Actions have been initiated for implementation of this revamp and it is expected to be completed by Q3 2023-24.

5. The Neem Project:

A large scale Neem Seed expelling / extraction unit is under implementation to produce about 2,900 MT Neem oil and about 22,000 MT per annum Neem cake and it is expected to be completed by Q-2 of 2020-21.

6. Coal based Captive Co-generation Power Plant at Dahej:

Company has set up 100 MT/hr capacity gas based boiler at TDI-II Complex Dahej to meet captive steam requirement while power is being sourced from DGVCL grid. There is large variation in gas prices. In order to reduce cost of steam and power and to improve their reliability, a coal based Captive Co-generation Power Plant with a capacity to produce 18 MW power and 150 MT/hr steam is actively being considered.

10.0 Significant changes in Key financial ratios:

Particulars	FY 2019-20	FY 2018-19
Debtors turnover ratio	3.89	5.00
Inventory turnover ratio	5.86	7.81
Interest coverage ratio	131.76	170.64
Current ratio	2.03	2.43
Debt equity ratio	0.16	0.04
Operating profit margin	8%	14%
Net profit margin	10%	13%
Return on net worth	11%	17%

- Inventory turnover ratio decreased by 25% due to increase in average inventory by Rs. 126 crore and decrease in sales by Rs. 734 crore.
- Debt equity ratio increase by 295% mainly due to increase in short term debt by Rs. 650 crore.
- Operating profit margin decreased by 43% due to decrease in profit before tax by Rs. 396 crore and decrease in revenue from operation by Rs. 734 crore.
- Return on net worth decreased by 35% due to decrease in net profit by Rs. 242 crore.

11.0 Human Resource Management:

The company's Human Resource continues to be one of the most valued contributors to the success of business of the company. Concerted efforts have been put up for ensuring well-being of employees on professional as well as familial fronts with focused attention to provide an inclusive environment for promoting diversity in gender, age and culture inculcating organizational values and ethics, learning cultures etc. in the functional areas. The company makes all possible efforts for improving the well-being of their employees by implementing various welfare schemes leading to an atmosphere conducive to the sustenance of growth of the company. The company conducts various in-house training programs such as safety awareness, environmental protection, health awareness, awareness on sexual harassment policy, as also, for enhancing employee's skill, knowledge etc.

In its pursuit towards improving industrial relation, the Company's proactive actions have resulted into good, harmonious, cordial and healthy industrial relations throughout the year which has helped in sustainable growth and enrichment of values for the shareholders.

The total strength of the human asset of the Company was 2952 on 31st March, 2020.

12.0 Internal Controls System, Internal Audit and its Adequacy:

The company has adequate internal controls for its operational processes across the business segments to ensure efficient operations, compliance with internal policies, applicable laws and regulations, protection of resources and assets and accurate reporting of financial transactions.

The Company has internal audit system which is conducted by a reputed firm of Chartered Accountants so as to cover various operations on continuous basis. The internal audit plans and reports are reviewed by the Management and Audit committee and necessary actions plans are decided, wherever needed.

The company has exhaustive operational as well as procurement budget system in place. Throughout the year, actual expenses are monitored against budgeted. Variances are analysed and timely corrective actions are taken, when needed.

Company has a strong MIS system which is being continuously monitored and fine-tuned for business needs using qualitative and quantitative methods. This mode provides early warnings to business decision makers to steer business appropriately.

13.0 Cautionary Statement:

The statements in Management Discussion and Analysis describing the company's objectives, expectations or projections, may be forward looking and it is not unlikely that the actual outcome may differ materially from that expressed, influenced by wide variety of factors affecting the business environment and the company's operations. The company assumes no responsibility to publicly amend, modify or revise any forward looking statements, on the basis of any subsequent developments, information or events.