Chapter 3

Manufacturing and Mining

In Pakistan, manufacturing with a share of 12.4 percent in GDP has a dominant presence within the industrial sector. Pakistan's national accounts capture manufacturing sector in three different components: Large Scale Manufacturing (LSM), Small Scale Manufacturing (SSM) and Slaughtering. Establishments having ten or more employees are covered under LSM. Quantum Index of Manufacturing (QIM) is a measure of LSM performance with 78.4 weight in overall LSM, derived from the Census of Manufacturing Industries (CMI) 2015-16 (Box-I). Similarly, Small Scale Manufacturing (SSM) information is also based on the survey[1] conducted in year 2015. It covers industrial and household units engaged in manufacturing activity having less than ten employees. While, slaughtering sector performance is estimated through a methodology which measures the value addition in output of the sector.

During FY2022, LSM with 9.2 percent of GDP dominates the overall manufacturing sector, accounting for 74.3 percent of the sectoral share followed by Small Scale Manufacturing, which accounts for 2.0 percent of total GDP and 15.9 percent sectoral share. The third component, slaughtering, accounts for 1.2 percent of GDP with 9.7 percent sectoral share.

3.1 Performance of Large-Scale Manufacturing

Unprecedented challenges posed by the COVID-19 pandemic exposed the vulnerabilities of global economies. Supply chains were disrupted due to business closures. The industry of Pakistan also experienced interlude in business activity leading to slowdown in its performance in FY2020. Nevertheless, LSM proved to be resilient and gained the growth momentum from the very start of FY2021 owing to gradual opening of economic activities and contingency measures from fiscal and monetary side in the form of industrial support package, construction package, auto policy, ultra-low policy rate, housing finance, and export financing facility coupled with vaccination drive.

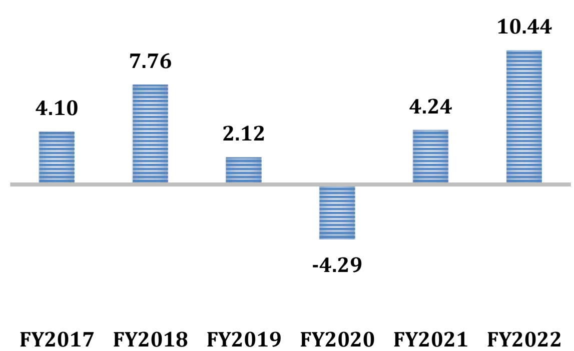
Although Pakistan has survived from the COVID-19 crisis, but it faced the daunting tasks in FY2022 such as controlling stimulus induced fiscal deficit, curtailing widening current account deficit, managing pressure on exchange rate along with achieving a sustainable post-pandemic recovery. Moreover, pent-up demand fueled by stimulus and pandemic disruptions accelerated inflation around the world. Additionally, Ukraine War continues

[1] A survey titles "Small and Household Manufacturing Industries (SHMI) 2015" was conducted by Pakistan Bureau of Statistics (PBS) for rebasing.

to stoke strong inflationary winds throughout the global economy resulting damage in the form of higher food and energy prices or new supply-chain disruptions. Thus, economic recovery from virus-induced economic recession would remain uncertain in the coming years because of uncertainty in pandemic resurgences as well as uncertain geopolitical tensions.

Nevertheless, well calibrated measures and continuous support along with surging global demand, easy credits, and partially subsidized energy supplies bode well in achieving higher growth of LSM in FY2022 (Fig-3.1).

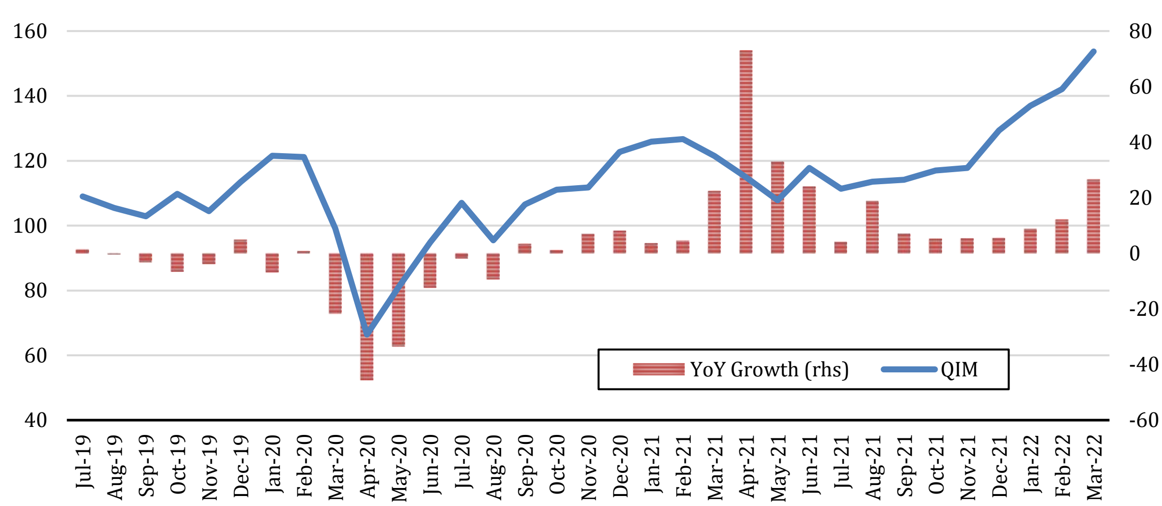
Fig 3.1: LSM Growth (%) Jul-Mar



Source: Pakistan Bureau of Statistics

During July-March FY2022, LSM staged the growth of 10.4 percent against 4.24 percent growth in the corresponding period last year. Production of 11 items under the Oil Companies Advisory Committee increased by 2.0 percent, 36 items under the Ministry of Industries and Production surged by 10.3 percent, while 76 items reported by the Provincial Bureaus of Statistics increased by 12.1 percent. The expansion of LSM is also appeared to be broad based, with 17 out of 22 sectors of LSM witnessed a positive growth. Furniture, Wood Products, Automobile, Footballs, Tobacco, Iron & Steel Products, Machinery and Equipment, and Chemical Products remained the top performing sectors of LSM.

Fig 3.2: Monthly Quantum Index Of Manufacturing (QIM)



Source: Pakistan Bureau of Statistics

Since September 2020, the LSM has rebounded after months of a downturn. On year-on-year (Y-o-Y) basis, LSM grew by 26.6 percent in March FY2022 against 22.5 percent growth in the same month last year (Fig. 3.2). Initially the pace was slow till December 2021, but rebounded from January 2022 onwards. While, Month-on-Month (M-o-M) basis, growth of LSM marked the growth of 8.2 percent in March 2022 as compared to 3.7 percent in February 2022.

Box-I: Rebasing of Quantum Index of Large Scale Manufacturing Industries (from 2005-06 to 2015-16)

Rebasing of Large Scale Manufacturing Industries has been conducted with the following objectives:

- To measure the structural changes in Large Scale Manufacturing Industries, new Census of Manufacturing Industries (CMI) is conducted on the base of 2015-16.
- Pakistan Standard Industrial Classification (PSIC) 2010, derived from UN International Standard Industrial Classification ISIC Rev-4, has been used to classify manufacturing activities.
- The current QIM is rebased on the basis of results of CMI 2015-16. Important changes can be gauged from the table below:

	QIM 2005-06		QIM 2015-16	
Sources	**No. of Items**	**Weights (%)**	**No. of Items**	**Weights (%)**
Total	112	70.30	123	78.40
Ministry of Industries & Production	36	49.56	36	40.54
Oil Companies Advisory Council	11	5.41	11	6.66
Provincial Bureaus of Statistics/PBS	65	15.37	76	31.17

Coverage

Previous censuses were conducted on the frame of Labour and Industries departments which had low coverage. To improve coverage, Business Register (BR) of PBS was utilized for the current census, which is based on different administrative sources like SECP, FBR, EOBI, PSX, Distribution companies of WAPDA, Provincial Labour and Industries departments, etc. which resulted to 390 percent increase in frame as understated below:

Number of Establishments	QIM 2005-06	QIM 2015-16
Frame	8,680	42,578
Respond	6,417	23,712
Major Groups	15	23

Source: - Pakistan Bureau of Statistics

3.2 Group Wise Analysis of LSM

Group-wise growth of LSM during the period of July-March FY2022 is given in Table 3.1.

Table 3.1: Group wise growth of LSM

S#	Groups	Weights	% Change (Jul-Mar)	
			2020-21	2021-22
1	Food	10.69	27.1	11.7
2	Beverages	3.84	0.2	0.7
3	Tobacco	2.07	17.8	16.7
4	Textile	18.16	8.0	3.2
5	Wearing Apparel	6.08	-35.6	34.0
6	Leather Products	1.23	-37.8	1.5
7	Wood Products	0.18	-46.2	157.5
8	Paper & Board	1.63	-0.6	8.5
9	Coke & Petroleum Products	6.66	12.3	2.0
10	Chemicals	6.48	9.0	7.8
	Chemicals Products	2.55	14.5	15.2
	Fertilizers	3.93	5.9	3.3
11	Pharmaceuticals	5.15	10.5	-0.4

Table 3.1: Group wise growth of LSM

S#	Groups	Weights	% Change (Jul-Mar)	
			2020-21	2021-22
12	Rubber Products	0.24	-13.1	-20.6
13	Non-Metallic Mineral Products	5.01	18.5	1.1
14	Iron & Steel Products	3.45	-8.6	16.5
15	Fabricated Metal	0.42	-0.7	-7.2
16	Computer, electronics and Optical products	0.03	-38.6	1.0
17	Electrical Equipment	2.05	-17.1	-1.1
18	Machinery and Equipment	0.39	50.8	8.9
19	Automobiles	3.10	21.6	54.1
20	Other transport Equipment	0.69	19.2	-10.2
21	Furniture	0.51	71.7	301.8
22	Other Manufacturing (Football)	0.32	-29.8	37.8

Source: Pakistan Bureau of Statistics

Textile sector weight has been reduced from 20.9 to 18.16 in QIM 2015-16 but still the highest among all sectors of LSM. The sector grew by 3.2 percent during July-March FY2022 as compared to 8.0 percent in the same period last year. Major growth originated from woolen segment production with highest surge of 38.9 percent in blankets, 27.9 percent growth in woolen & carpet yarn, and 19.1 percent in woolen & worsted cloth. Production of yarn and cloth showed marginal growth of 0.7 and 0.3 percent, respectively. Congruent production units, invariant capacity and elevated cotton prices owing to demand and supply gap disruptions have moderated the growth momentum of the cotton sector. Depreciation of rupee restrained the production of jute, as most of the raw material is imported from Bangladesh. However, surge in imports of textile machinery[2], rising demand for concessionary financing[3] from textile firms and high exports[4] of this sector showing a sizeable improvement in the textile sector.

Wearing apparel has been separated from textile sector with 6.08 weight in QIM showing the growth of 34 percent against the contraction of 35.6 percent. The sector has gained traction local as well as in international market as garments production grew at 34.0 percent during the period. The export of garments also escalated with 33.9 percent growth in terms of quantity during July-March FY2022.

Food group having second highest weight of 10.69 in QIM witnessed the growth of 11.7 percent during the period under review against 27.1 percent same period last year. Sugar, bakery and chocolate & sugar confectionary, tea blended, and starch came up with significant growth of 38.1, 11.9 and 10.6 percent respectively. Historic bumper crop of sugar cane and better international prices pushed up the production level of sugar in Pakistan. Production of cooking oil increased by 10.8 percent, while vegetable ghee down by 2.5 percent. Surging prices of palm oil and soyabean in international market

[2] As per PBS, textile machinery imports reached to US$ 621.7 million from US$ 377.5 million showing an increase of 64.7 percent during Jul-Mar FY2022.
[3] According to SBP, out of 202.9 billion of total financing of LTFF/TERF under fixed financing 94.6 billion has been borrowed by textile sector (i.e., 46.6 percent of total financing to private sector business).
[4] According to PBS, exports of textile group increased by 25.4 from 11.4 billion to 14.2 billion during Jul-Mar FY2022.

accompanied with the depreciating Pakistani currency against the dollar were the major factors responsible for lower level of production. Production of wheat & rice milling stood negative at 2.6 percent during the period under review.

Coke and Petroleum products marginally grew by 2.0 percent in July-March FY2022 against 12.3 percent same period last year. High global energy prices depressed the overall growth momentum. However, pickup in economic activities especially automobile and resultant increase in transportation activities and oil sales (which showed an increase of 14.9 percent during July-March FY2022 and clocked at 16.3 million tonnes) partially offset the impact of high fuel prices. Besides, production of jute batching oil, jet fuel oil, kerosene oil, diesel and Solvant Naptha remained encouraging as demand spurred from transportation.

Automobile sector marked a vigorous growth of 54.1 percent during July-March FY2022 against 21.6 percent growth last year. New Auto Policy, to promote new technologies including Electric Vehicles (EVs) and Hybrid, and accommodative monetary policy to promote auto financing paved the way to grew automobiles production. Besides, tax incentives to promote locally manufactured cars also pent-up the demand as well as the production of the given sector such as locally manufactured hybrid sales tax reduced from 12.5 percent to 8 percent and FED reduced by 2.5 percent upto 1300cc for locally manufactured cars. Moreover, during July-March FY2022 car production and sale increased by 56.7 and 53.8 percent, respectively. Trucks & Buses production and sale increased by 66.0 and 54.0 percent and tractor production and sale increased by 13.5 and 12.1 percent, respectively. Though the relief measures in form of waiving of taxes pushed up the sector, in the meanwhile reduced the revenues of national exchequer and built the pressure on imports besides creating uncertainty in market sentiments.

Iron & Steel production jumped by 16.5 percent during the period under review against the contraction of 8.6 percent in the same period last year. Billets/Ingots, mainly used in construction industry, grew by 32.8 and H/C.R.Sheets/Strips/Coils/plates increased by 7.9 percent. Both reflect the growth momentum in automobile and construction-allied sectors. Non-metallic Mineral Products inched up 1.1 percent as compared to 18.5 percent increase last year.

Chemicals is subdivided into two components i.e., chemical products and fertilizers with the total weight of 6.48 in QIM. The chemical products showed the growth of 15.2 percent against 14.5 percent same period last year. Sulphuric acid, hydrochloric acid, soda ash, and toilet soaps remained the major contributors to overall growth of chemicals. On the other hand, Fertilizers production showed a meager growth of 3.3 percent as compared to 5.9 percent growth during last year.

Pharmaceuticals growth witnessed a dip of 0.4 percent during July-March FY2022, against the growth 10.5 percent last year, triggered by hefty decline observed in capsules, injections, tablets and galenicals. Electrical equipment declined by 1.1 percent against the hefty shrink of 17.1 percent.

Paper and Board production increased by 8.5 percent during July-March FY2022 as compared to dip of 0.6 percent last year. Rubber Products nosedived by 20.6 percent during July-March FY2022 as compared to 13.1 percent growth in the same period last year. Wood Products jumped by 157.5 percent as compared to contraction of 46.2 percent last year. Production of Plywood remained the sole contributor to overall pick up in the output of wood. Furniture production drastically increased by 301.8 against 71.7 percent in the same period last year.

Other manufacturing, particularly footballs production substantially increased by 37.8 percent as compared to 29.8 decline in the corresponding period last year. The sector picked up the growth by pent-up demand in international market and marked a growth of 40.3 percent in exports.

Selected items of Large-Scale Manufacturing are given in Table 3.2.

Table-3.2: Production of selected industrial items of Large-Scale Manufacturing

S#	Items	Unit	Weights	July-March		% Change	% Point Contribution
				2020-21	2021-22		
1	Deepfreezers	(Nos.)	0.167	68,947	84,205	22.13	0.04
2	Jeeps and Cars	(Nos.)	2.715	114,617	177,757	55.09	1.41
3	Refrigerators	(Nos.)	0.246	928,170	1,024,335	10.36	0.02
4	Upper leather	(000 sq.m.)	0.398	13,324	10,966	-17.70	-0.06
5	Cement	(000 tonnes)	4.650	37,619	36,543	-2.86	-0.21
6	Liquids/syrups	(000 Litres)	1.617	86,212	144,638	67.77	1.30
7	Phos. fertilizers	(N tonnes)	0.501	545,612	601,184	10.19	0.06
8	Tablets	(000 Nos.)	2.725	20,380,940	14,695,108	-27.90	-0.85
9	Cooking oil	(tonnes)	1.476	334,107	370,181	10.80	0.21
10	Nit. fertilizers	(N tonnes)	3.429	2,450,066	2,505,757	2.27	0.09
11	Cotton cloth	(000 sq.m.)	7.294	786,042	788,285	0.29	0.02
12	Vegetable ghee	(tonnes)	1.375	1,087,827	1,060,111	-2.55	-0.05
13	Cotton yarn	(tonnes)	8.882	2,577,675	2,594,690	0.66	0.07
14	Sugar	(tonnes)	3.427	5,618,976	7,759,825	38.10	2.13
15	Tea blended	(tonnes)	0.485	100,566	112,544	11.91	0.06
16	Petroleum Products*	(000 Litres)	6.658	-	-	2.10	0.01
17	Cigarettes	(million No)	2.072	39,473	46,070	16.71	0.38

*Due to different weights within Petroleum products, total output cannot be calculated.
Source: Pakistan Bureau of Statistics (PBS)

3.3 Textile Industry

Textile is the most important manufacturing sector of Pakistan and has the longest production chain, with inherent potential for value addition at each stage of processing, from cotton to ginning, spinning, fabric, dyeing and finishing, made-ups and garments. This sector contributes nearly one-fourth of industrial value-added and provides employment to about 40 percent of industrial labor force. Barring seasonal and cyclical fluctuations, textiles products have maintained an average share of about 61.24 percent in national exports. The export performance of textile sector during the period under review is given in Table 3.3.

Table 3.3: Export of Pakistan Textiles						(US$ millions)
	2016-17	**2017-18**	**2018-19**	**2019-20**	**2020-21**	**2021-22 (Jul-Mar)**
Cotton & Cotton Textiles	12205	13220	13031	12211.703	15028.852	13890.824
Synthetic Textiles	187.587	309.681	297.809	314.768	370.421	343.591
Sub-Total Textiles	12392.587	13529.681	13328.807	12526.471	15400.077	14234.415
Wool & Woolen Textiles	78.506	75.852	67.265	54.211	74.201	60.993
Total Textiles	12529.002	13605.902	13396.140	12580.682	15474.278	14295.408
Pakistan`s Total Exports	20477.692	23221.968	22979.325	21393.860	25304.441	23354.901
Textile as %age of Export	61.35%	58.59%	58.30%	58.81%	61.15%	61.24%

Source: Textile Commissioner's Organization

3.3.1 Ancillary Textile Industry

The ancillary textile industry includes cotton spinning, cotton cloth, cotton yarn, cotton fabric, fabric processing, home textiles, towels, hosiery, knitwear and readymade garments. These components are being produced both in the large-scale organized sector as well as in the unorganized cottage / small and medium units. The performance of these various ancillary textile industries is illustrated as under:

i. Cotton Spinning Sector

The spinning sector is the backbone in the ranking of textile production. At present, as per record of Textiles Commissioner's Organization (TCO), it comprises of 517 textile units (40 composite units and 477 spinning units) with 13.414 million spindles and 198,801 rotors installed and 11.338 million spindles and 126,583 rotors in operation with capacity utilization of 84.55 percent and 63.67 percent, respectively.

ii. Cloth Sector

This sector is producing comparatively low value-added grey cloth of mostly inferior quality. Problems of the power loom sector evolve mainly around poor technology and scarcity of quality yarn. Production of cotton cloth by mill sector has slightly increased by 0.29 percent, while non-mills performance remained subdued and recorded negative growth of 0.01 percent during July-March FY2022. However, the exports in term of quantity and value both increased by around 9 percent and 26.5 percent, respectively.

Table 3.4: Production and Export of Clothing Sector			
Production	**July-March 2021-22**	**July-March 2020-21**	**% Change**
Mill Sector (000. Sq. Mtrs.)	788,285	786,042	0.29
Non Mill Sector (000. Sq. Mtrs.)	6,103,340	6,103,958	-0.01
Total	6,891,625	6,890,000	0.02
Cotton Cloth Exports			
Quantity (M.SqMtr.)	342.700	314.562	8.95
Value (M.US$)	1795.457	1419.181	26.51

Source: Textile Commissioner's Organization

iii. Textile Made-Up Sector

Being value added segment of textile industry made-up sector comprises different subgroups namely towels, tents & canvas, cotton bags, bed-wear, hosiery, knitwear &

readymade garments including fashion apparels. Export performance of made-up sector during the period July-March FY2022 is presented in Table 3.5.

Table 3.5: Export of Textile Made-Ups

	(July-March) 2021-22	(July-March) 2020-21	% Change
Hosiery Knitwear			
Quantity (M.Doz)	120.946	127.104	-4.84
Value (M.US$)	3729.683	2780.896	34.12
Readymade Garments			
Quantity (M.Doz)	37.293	27.845	33.93
Value (M.US$)	2863.570	2268.389	26.24
Towels			
Quantity (M Kgs)	167.009	158.914	5.09
Value (M.US$)	819.589	692.110	18.42
Tents/Canvas			
Quantity (M Kgs)	29.281	32.908	-11.02
Value (M.US$)	82.144	89.160	-7.87
Bed Wears			
Quantity (000 MT)	394.996	343.436	15.01
Value (M.US$)	2448.859	2052.259	19.33
Other Made up			
Value (M.US$)	60.993	54.324	12.28

Source: Textile Commissioner's Organization

iv. Hosiery Industry

There is greater reliance on the development of this industry as there is substantial value addition in the form of knitwear. The industry provides directly and indirectly sustenance to well over a million people. Knitwear exports consists of knitted and processed fabrics knitted garments; knitted bed sheets, socks etc. and has the largest share, i.e., 16.55 percent of the nation's textile exports. The export of knitwear showed contraction of 4.8 percent in quantity terms, while it increased by 34.1 percent in terms of value during the period under review.

v. Readymade Garment Industry

Readymade garment industry has emerged as one of the important small-scale industries in Pakistan and is a good source of providing employment opportunities to many people at a very low capital investment. Owing to huge potential and demand, its exports show a massive growth of 33.9 percent in quantity and 26.2 percent in value from 27.8 million dozen to 37.3 million dozen worth US$ 2,863.57 million during July-March FY2022 as compared to US$ 2,268.38 million during July-March FY2021.

vi. Towel Industry

The existing towels manufacturing factories are upgraded to produce higher value towels. This industry is dominantly export-based and its growth depends on export outlets. Exports in this sector stood at US$ 819.6 million against US$ 692.1 million during July-March FY2022, thereby showing an increase of 18.4 percent in terms of value and 5.1 percent in terms of quantity.

vii. Canvas

The performance of canvas remained subdued both in term of quantity and value which shows decline of 11.02 percent and 7.87 percent, respectively, and recorded at 29.3 million Kgs during the period under review as compared to 32.9 million Kgs during the same period last year.

viii. Synthetic Textile Fabrics

Artificial silk such as Synthetic fibers Nylon, Polyester, Acrylic and Polyolefin dominate the market. There are currently five major producers of synthetic fibers in Pakistan, with a total capacity of 636,000 tons per annum. Synthetic textile fabrics worth US$ 343.59 million were exported as compared to US$ 269.20 million last year which is showing an increase of 27.6 percent. In Quantitative terms, the exports of synthetic textile decreased by 33.6 percent.

ix. Woolen Industry

The main products manufactured by the Woolen Industry are carpets and rugs. The exports of carpets during the period July-March FY2022 are given in the Table 3.6.

Table 3.6: Exports of Carpets and Rugs (Woolen)

	(July-March) 2021-22	(July-March) 2020-21	% Change
Quantity (Th.Sq.Mtr)	1.799	1.109	62.22
Value (M.US$)	60.993	54.324	12.28

Source: Textile Commissioner's Organization

x. Jute Industry

The main products manufactured by the Jute Industries are Jute Sacks and Hessian cloth, which are used for packing and handling of Wheat, Rice and Food Grains. The installed and working capacity of jute industry is given in the Table 3.7.

Table 3.7: Installed and working capacity of Jute

	(July-March) 2021-22	(July-March) 2020-21	% Change
Total No. of Units	10	10	0
Spindles Installed	25060	25060	0
Spindles Worked	16973	21172	-19.8
Looms Installed	1102	1134	-2.8
Looms Worked	737	885	-16.7

Source: Textile Commissioner's Organization

3.4 Other Industries

3.4.1 Automobile Industry

Except sluggishness in some areas in case of Buses and two/three wheelers there has been robust growth in all-automobile sectors during July-March FY2022. The higher growth effectively manifest clearing up the pent-up demand of COVID-19 period, otherwise negativity or stagnation in growth was persisting for the last five years. During the year under consideration, there has been persistent supply chain interruptions due to Chip shortages, skyrocketing freight costs, unrelenting rupee weakening, galloping inflation and auto financing restriction on high-end vehicles to reduce the import bill. Further, the earlier reduced taxes at the time of budget 2021-22 were reversed in the subsequent mini-budget thus frustrating the possible impetus to growth.

New Auto Industry Development and Export Policy 2021-26 has been announced Besides Make in Pakistan notion, in the new policy, interalia, Meri Gari Scheme, New Product Policy and setting up of export targets have been introduced. All these measures are encouraging, and it is expected that these initiatives would soon see the light of day. However, in the forthcoming outlook the demand would weaken, as disposable incomes would decline with higher inflation, and higher exchange rates and increasing interest rates, amongst other factors.

The august performance has been observed in automobile sector during the period of July-March FY2022 (Table 3.8). It was the latent demand for motor vehicles that showed about 50 percent plus growth. Also, in the heavy commercial vehicles, there is substantial growth in trucks as the medium size trucks, around 5 ton, unexpectedly became popular due to affordability and expansion of e-commerce. Additionally, number of small trucks signed up at a reduced rate of 5 percent in response to Kamyab Jawan Scheme. More market expansion is expected owing to inbuilt confidence by the current investors as well as the new entrants in bringing locally produced hybrid vehicles. Therefore, all projections cast a positive outlook for the industry.

In case of passenger cars, the production and sales are up by 57 percent and 54 percent with 166,768 and 172,612 units, respectively. In this regard, higher growth has been observed in up to 800cc and up to 1000cc segments registering 77 percent and 65 percent growth, respectively. Growth in exceeding 1000cc segment was 35 percent. For similar reasons, the production and the sales of light commercial vehicles (LCV) and SUVs registered increase by 44 percent and 46 percent, respectively. In the SUV and SUV crossover segment two new products appear from Beijing Automotive Industry, BAIC BJ40L and BAIC X25 with modest numbers which are expected to grow in time.

Farm tractor sector has shown growth with production and the sales up by 13.5 percent and 12 percent respectively. This pleasant upward surge was due to overall growth in agriculture sector ensuing better crop prices and consequent more buying power of the farmers. However, these numbers are not even close to the highest numbers this industry had achieved in the past.

The two/three wheelers sector showed modest fall in production and the sales by 3.5 percent and 4.1 percent respectively. This fall is due intra-industry production losses by some units, while other units have shown their natural growth. Two/three wheelers offers most economical public transport alternate for the lower income group, however, at same time, it is extremely price sensitive. Massive exchange rate losses kicked off inflationary conditions resulting inevitable price increase. Still, this sector offers most preferred means of transport and best alternative in the absence of Public Transport in the cities and thus holds a dependable and continued potential for growth in the coming years.

Table 3.8: Production of Automobiles

Category	Installed Capacity	No. of Units		
		2020-21 (July-March)	2021-22 (July-March)	% Change
CAR	341,000	106,439	166,768	56.7
LCV/JEEPS/SUV/Pickup	52,000	22,512	32,341	43.7
BUS	5,000	445	459	3.1
TRUCK	28,500	2,509	4,445	77.2
TRACTOR	100,000	36,900	41,872	13.5
2/3 WHEELERS	2,500,000	1,439,535	1,388,669	-3.5

Source: Pakistan Automotive Manufacturer Association (PAMA)

The auto sector constitutes about 15 percent to LSM, hence represents significant industrial output of the country. According to PBS, automobile recorded 54.1 percent upsurge during July-March FY2022. Despite robust growth during 9 months of FY2022, the higher numbers, to a great extent, fall short of installed capacities. Also, these numbers are far too meager against production projections made in the successive auto policies. Long-term policies attracting new players did indeed expand the market with new makes and models but volumes did not go across critical level that warrant broad-based localisation and import substitution. Auto industry heavily invested during the last four decades to establish engineering base in the country and undertook innumerable transfer technology agreements. All this holds a bright future for so far best performing auto-sector amongst the large-scale manufacturing.

Given Government support and removal of irritants would soon going to bear fruits in the wake of industrial expansion as many new investors have joined with commercial production while the existing players have already made huge investments and a lot more is in waiting. These investments by the new and the existing players is testimony to confidence in our market, at home and abroad. Given the macroeconomic stability in the country and the extraneous factors not to go out of hand, particularly in terms of unwanted tariffs and untoward policies, the latent demand would burst out and expansion of industry volumes would sure to take place.

Box-II: Tractor Industry a Success Story: Made in Pakistan

The tractor industry is a success story of Pakistan's manufacturing sector. The industry has established itself on firm footing by achieving more than 90 percent localization in the production of tractors. The country is not only meeting the local demand for tractors effectively but producing exportable surplus as well. Given the fact that Pakistan was a net importer of tractors a few years ago and imported US$ 195 million worth of tractors in 2017, it is a commendable feat that the country exported tractors to the tune of US$ 47 million in FY2021. During Jul-Mar FY2022, Pakistan's exports of tractors have been US$ 29.9 million.

Pakistan manufactures the world-renowned Massey Fergusson and New Holland Fiat Tractors under license from the parent companies. Due to high level of localization achieved, Pakistan's low-priced tractors are well- received in Afghanistan and African countries. Botswana, Nigeria and Kenya have emerged as the largest export destinations for tractors. Most of the tractors manufactured in Pakistan have engine power between 50-100 HP.

The burgeoning demand in the local market has spearheaded the production of tractors in Pakistan. During Jul-Apr FY2022, a total of 47,364 units of tractors were manufactured in Pakistan while in the same period last year 41,589 units were manufactured. A total of 50, 486 units were manufactured in the previous fiscal year. The tractor industry has also promoted the growth of allied industries. For example, the iron and steel sector are the major supplier of raw material to the tractor industry and its growth hinges on tractor production in Pakistan. Furthermore, tractor parts and raw material are also being exported worldwide as the allied industries are gradually finding their own feet.

The Agriculture Machinery sector, more specifically the tractor industry, is also promoting the development of SMEs in the engineering sector. Aside from a few big names, most of the manufacturers are small businesses that are successfully meeting the local demand. Some of these players have also established themselves in exports. They manufacture tools and implements that are attached with tractors such as front loaders etc. These implements are considered complementary parts of tractors and are essential for tillage and harvesting.

In the Engineering and Healthcare Show, organized by the MOC and TDAP in February 2022, Pakistan's tractors and agriculture machinery were in the limelight. The interest of foreign delegates could be gauged from the fact that two deals worth more than US$ 200,000 were finalized on the spot. It is expected that Pakistan's tractor exports will grow in the near future.

Source: Trade Development Authority of Pakistan

3.4.2 Fertilizer Industry

Fertilizer is an important and costly input responsible for 30 to 50 percent increase in the crop productivity. The overall objective is sustainability and growth in agricultural sector that should match the growing population for food security and the promotion of economic growth. There are nine urea manufacturing plants, one DAP, three NP, four SSP, two CAN, one SOP and two plants of blended NPKs having a total production capacity of 9,172 thousand tonnes per annum. Total fertilizer production during July-March FY2022 was 6,833 thousand tonnes which was 2.9 percent more as compared to the corresponding time of the last year. This increase in fertilizer production is attributed to supply of gas to Fauji Fertilizer Bin Qasim Limited (FFBL) Plant during winter season. Urea is main fertilizer having 70 percent share in total production. Installed production capacity of 6,307 thousand tonnes per annum is enough to meet local demand subject to the availability of uninterrupted gas and RLNG supply.

Nutrient offtake during July-March FY2022 remained 3,826 thousand tonnes which was 3.6 percent less than the corresponding period of the previous year. Nitrogen and phosphate offtake were 2,861 and 903 thousand tonnes, respectively, whereas Potash offtake was 63 thousand tonnes. Offtake of Nitrogen during current fiscal year increased slightly by 0.02 percent, while offtake of Phosphate decreased by 14.3 percent as compared to corresponding time frame of the last year.

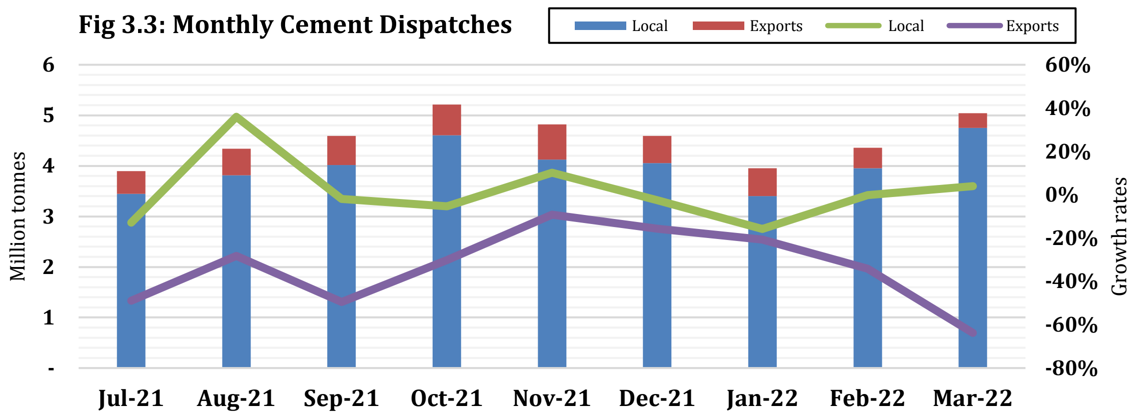
Urea and DAP offtake remained 5,076 thousand tonnes and 1,534 thousand tonnes, respectively. Urea offtake increased by 6.5 percent while DAP offtake decreased by 18.6 percent as compared to the same period of the previous year.

3.4.3 Cement Industry

Cement industry of Pakistan remained under pressure since the beginning of FY2022. This was largely attributed to a revival in construction activities in the second half of 2020 as COVID-19 lockdowns were eased. Since then, the demand for cement was said to be 'sluggish' due to inflation and high commodity prices. It also pinned its marked fall in exports on political and economic instability in Afghanistan.

Cement industry showed a decline of 6.3 percent in March FY2022 on Y-o-Y basis due to massive decline in exports. Total cement dispatches stood at 5.04 million tonnes (mt) as against 5.38 mt last year. Domestic consumption grew by 4.02 percent and reached 4.75 mt as compared to 4.56 mt in March FY2021. The largest hit was observed by exports which drastically decrease by 63.8 percent to 0.30 mt dispatches in March FY2022 as compared to 0.82 mt during same period last year. This was largely attributed to rising international freight rates, political and economic instability in Afghanistan and a trade ban with India.

Fig 3.3: Monthly Cement Dispatches



Source: All Pakistan Cement Manufacturer Association

Northern Region

Domestic consumption in the north recorded at 3.85 mt in March FY2022 as compared to 3.81 mt dispatches in the same month last year thus showing a slight growth of 1.07 percent. Exports from north plummeted by 71.3 percent and stood at 0.08 mt during the period as compared to 0.28 mt same period last year.

Southern Region

Domestic consumption in the south increased by 18.9 percent and reached to 0.90 mt in March FY2022 as compared to 0.75 mt in March FY2021. While exports from the region decreased by 59.8 percent, from 0.53 mt to 0.21 mt in March FY2022.

Cumulative Dispatches

Total local dispatches during July-March FY2022 slightly decreased by 0.03 percent to 36.17 mt from 36.18 mt last year. While, total exports clocked in at 4.64 mt (-35.04 percent) against 7.15 mt during the same period last year. Local dispatches from the northern region decreased by 2.27 percent, while southern region dispatches surged by 12.3 percent. Exports from the north nosedived by 64.5 percent, while south witnessed fall of 24.3 percent growth during the period.

Cumulative dispatches (local & exports) posted a decline of 5.8 percent and reached 40.82 mt during July-March FY2022 against 43.32 mt in the corresponding period.

Table 3.9: Cement Production Capacity & Dispatches (Million Tonnes)

Years	Production Capacity	Capacity Utilization (%)	Local Dispatches	Exports	Total Dispatches
2006-07	30.50	79.23	21.03	3.23	24.26
2007-08	37.68	80.14	22.58	7.72	30.30
2008-09	42.28	74.05	20.33	10.98	31.31
2009-10	45.34	75.46	23.57	10.65	34.22
2010-11	42.37	74.17	22.00	9.43	31.43
2011-12	44.64	72.83	23.95	8.57	32.52
2012-13	44.64	74.89	25.06	8.37	33.43
2013-14	44.64	76.79	26.15	8.14	34.28
2014-15	45.62	77.60	28.20	7.20	35.40
2015-16	45.62	85.21	33.00	5.87	38.87
2016-17	46.39	86.90	35.65	4.66	40.32
2017-18	48.66	94.31	41.15	4.75	45.89
2018-19	59.74	78.48	40.34	6.54	46.88
2019-20	63.63	75.14	39.97	7.85	47.81
2020-21	69.26	82.93	48.12	9.31	57.43
July-March					
2020-21	69.26	83.41	36.18	7.15	43.32
2021-22	51.94	78.58	36.17	4.64	40.82

Source: All Pakistan Cement Manufacturers Association (APCMA)

3.5 Small and Medium Enterprises

Small and Medium Enterprises (SMEs) are indispensable to the progress of the nation as it contributes significantly to the economic and social development of the country in a myriad way: create employment opportunities, foster human resource development and stimulate value addition to the economy.

To support SMEs to play their due role in economic development, Small and Medium Enterprises Development Authority (SMEDA) has taken various initiatives. The organization has an all-encompassing mandate of fostering growth of the SME sector through its portfolio of services including business development services, infrastructure development through establishing common facility centers, industry support for productivity enhancement and energy efficiency, human capital development through its training programs, and SME related projects with national and international development partners. Key activities / achievements of SMEDA during July-March FY2022 are shown in Table 3.10.

Table 3.10: SMEDA Over the Counter (OTC) Services

Sr. No.	Initiatives	July-March FY2022
1.	SME Facilitation	4,314
2.	Pre-feasibility Studies Development (New & Updated)	68
3.	Investment Facilitation (RS million)	579.5
4.	Business Plans	15
5.	Training Programs	203
6.	Theme Specific Helpdesks	74
7.	Cluster / District Profiles (New and Updated), Diagnostic / Value Chain Studies	16
8.	SMEDA Web Portal (Download Statistics)	366,995
9.	SME Observer	1 Issue
10.	SMEDA Newsletter	3 Issues

Source: SMEDA

National SME Policy 2021

Rapidly changing economic environment requires policy and institutional focus that can make SME sector of Pakistan competitive in international markets and fulfill the multiple agenda of employment creation, new enterprise development, increased exports, and enhanced contribution to GDP. In this regard, approval and launch of National SME Policy 2021 (Box-III) is an important milestone to revitalize and rejuvenate SME sector to realize the target of inclusive economic growth.

Box–III: National SME Policy 2021

Government has launched the National SME Policy 2021 in January 2022, underlining the importance of supporting small businesses and startups with **key performance targets** to be achieved by 2025 includes:

- Increasing the economic contribution of SMEs via sustaining a growth rate of small scale manufacturing by 9 percent, services sector SMEs by 10 percent, average employment by 5 percent and exports by 10 percent per annum.
- Making SMEs more competitive & productive via increasing credit to Rs 800 billion and number of borrowers from 172,893 to 700,000
- Number of registered businesses to grow by 10 percent per year.

Policy envisions to introduce following initiatives under key thematic areas:

1. **SME Definition:** Adoption of single definition for SMEs across Pakistan:

Enterprise Category	Criteria Annual Sales Turnover
Small Enterprise (SE)	Up to Rs 150 million
Medium Enterprise (ME)	Above Rs 150 million to Rs 800 million
Start-up	A small enterprise or medium enterprise up to 5 years old will be considered as Start-up SE or Start-up ME

The SME Definition enunciated in National SME Policy 2021 has been adopted by the State Bank of Pakistan through amendment in SME Prudential Regulations vide IH&SMEFD Circular No. 05 of 2022 dated March 29, 2022.

2. **Regulatory & Tax Environment**

   i. **SME Regulatory Reforms:** A total of 167 reform proposals have been identified and within a short span of time, 112 reform proposals have been implemented. Furthermore, no NOC regime for SMEs & Start-ups, BMR through a Risk Based Assessment Model, Self Declaration, Time Bound Approvals regime, E-inspection Portal and Sample Based Audits shall be instituted to simply regulatory regime for SMEs.

3. **Simplified Taxation Regime**: SMEs falling under particular size thresholds have been provided an option to opt for a presumptive tax regime and or normal tax regime with reduce taxation rates, minimal audit and reduced interface with the government. Other incentives include, single point collection of taxes and levies, progressive reduction in Withholding Tax with corresponding increase in formalization and Sales/ Income Tax receipts, no audit under presumptive regime, minimal audits under normal tax regime and Single Sales Tax Portal launched by the FBR to file single monthly Sales Tax returns instead of multiple returns.

4. **SMEs Access to Finance:** SBP's SME Aasan Finance Scheme (SAAF) scheme has been launched that provides, loans up to Rs 10 million for 3-year tenure with 40-60 percent Credit Risk Guarantee to SMEs. Other measures included in SME policy are to design, financing incentives for SMEs with tax

history, undertake specialized lending for micro and small enterprises, operationalization of Venture Capital and Credit Guarantee Company and such initiatives for promoting financial inclusion in the country.

5. **Skills, Human Resource & Technology:** A special focus has been placed on human resource development such as establishing National Skills Fund, undertaking skills mapping, support technology acquisition and research & development for technology upgradation, and developing model of labour market data management.

6. **Infrastructure:** Allocation of land in existing industrial estates on a land lease-based model is one of the pillars of the National SME Policy. For the purpose, 4,200 acres of land has been identified for SMEs with access to 19,500 plots to set-up business. Similarly, it is envisaged that identified plug and play infrastructure facilities will be made available to SMEs.

7. **Entrepreneurship, Innovation & Incubation:** To spur entrepreneurial activities, Policy focuses on creation and strengthening of legal frameworks for venture capital, equity financing, crowd-funding and other such avenues, scale-up incubation and acceleration programs and initiate entrepreneurship boot camps.

8. **Business Development Services:** Linking SMEs with Business Development Service Providers (BDSPs) on cost share basis and undertaking focused development initiatives for high growth SME sub-sectors will catalyze sectoral and cluster-based support for SMEs.

9. **Women Entrepreneurship Development:** A simplified taxation regime with 25 percent tax reduction in tax liability for income from business of women entrepreneurs has already been announced. Enhancing women's access to finance shall be ensured through implementation of State Bank of Pakistan's Banking on Equality Policy.

10. **Market Access:**

i. Participation of SMEs shall be supported in trade fairs, exhibitions & trade delegations. Furthermore, capacity of SMEs will be enhanced to make them export ready and for adopting digitization to capitalize upon the opportunities of a growing E-commerce market. In this regard, E - Tijarat Platform has been launched on February 21st, 2022 to facilitate SMEs.

ii. **Public Procurement:** Reservation in public procurement from SMEs, review of requirement of performance guarantees, bid bonds, securities and turnover restrictions, as well as Supplier/Contactors being bound to purchase a fixed percentage of business orders from SMEs are initiatives envisaged to be undertaken as part of implementation of the National SME Policy.

11. **Institutional Framework**

i. **National Coordination Committee (NCC) on SMEs Development:** NCC has been constituted to lead the agenda of SME development and ensure effective implementation of the National SME Policy 2021. The NCC is supported by **Provincial Working Groups** set up in each of the provinces.

ii. **Institutional Strengthening of SMEDA**

   a. **Institutional Reform of SMEDA:** SMEDA will be further strengthened to transform its organizational potential.
   b. **SME Registration Portal (SMERP)- Single Point Access to all Incentives:** An SME Registration Portal has been developed, which is integrated with NADRA, FBR, SECP and over time, other data gathering agencies. SMEs may register at the SME Registration Portal and apply for SME Size Certificate.
   c. **SME Development Fund:** An SME Development Fund to the tune of PKR 30 billion shall be established.
   d. **Census of Economic Establishments / SME Census:** Pakistan Bureau of Statistics (PBS) shall conduct Census of Economic Establishments.

e. **Advocacy:** SMEDA shall continue to take a central role in SME advocacy and coordination of SME related efforts across the country.
f. **Presence of SMEDA in Key Regulatory Arenas** as a voice of SMEs

Source: SMEDA

National Business Development Program for SMEs (NBDP):

NBDP has been developed, for providing SME start-up support & business improvement through practical, on-ground services to SMEs. The project provides support in establishing new enterprises and building the capacity of existing enterprises through provision of Business Development Services, such as; marketing, technology, incubation, research & development and organizational development services. The program envisages to facilitate 314,901 SMEs, over a period of five years. The total cost of project is Rs 1,954.978 million out of which an allocation of Rs 400 million has been made for FY2022.

In addition, Early-Stage Start-up (ESS) grant has been launched in October 2021 under which ESS grants up to Rs 500,000 will be provided to support SMEs & Start-ups. During July-March FY2022, 1600 applications were received and are under evaluation process. Furthermore, SMEDA's largest capacity building initiative comprising of 3,800 training programs during 5 years across Pakistan including Federal Capital, AJK & GB has also been launched under NBDP. Over 180 Theme & Sector-Specific training programs have been conducted with over 7,400 SME's participants. In addition, Demand-Based Training and On-Premises Training Programs for SMEs are also executed at their business locations. Certification Program for the capacity building of Individual Business Development Service Provider (IBDSPs) by offering subsidy to cover up to the 80 percent of the program cost per IBDSP has also been initiated during the period.

1000 Industrial Stitching Units, All Over Pakistan

SMEDA is executing PSDP project sponsored by the Ministry of Commerce and Textile (Textile Division) to boost value addition in the field of textile garments by establishing industrial stitching units across the country. Financial assistance through Matching Grants is provided for establishing "Industrial Stitching Units (ISUs)". Under this project, 60 percent of grant in the form of machinery is funded by the project and 40 percent cost is borne by the owner/entrepreneur of the stitching unit. The total cost of project is Rs 350.54 million out of which Rs 100 million has been allocated for FY2022. The target for the current Fiscal Year is to establish 50 ISUs. Grants application cycle has already been launched. Out of the total target of establishing 50 ISUs, 20 ISUs have been successfully established till 31st March, 2022 and the remaining ISUs are under process for completion.

UNDP-Small Business Interventions to Support Development of Clusters through CFCs

To develop clusters by establishing Common Facility Centers (CFCs), SMEDA and UNDP are jointly implementing Small Business Interventions Project. During the period, 4 and 3 CFCs were established at Khyber Pakhtunkhwa and Sindh respectively.

3.6 Mining and Quarrying

As per Pakistan Standard Industrial Classification (PSIC) 2010, the sector includes the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Apart from this, sector also includes services incidental to mining e.g., drilling services, derrick erection accompanied with other supplementary activities such as crushing, grinding, cleaning, drying, sorting, concentrating ores to prepare crude materials. The sector posted a negative growth of 4.5 percent during FY2022 against the positive growth of 1.2 percent last year.

3.6.1 Minerals

Owing to its unique geological condition, Pakistan is blessed with huge deposits of several minerals such as coal, copper, gold, chromite, mineral salt, bauxite, and several others. Despite of all huge potential, sector is lagging due to lack of infrastructure, poor technology and limited financial support.

During July-March FY2022, production of major minerals such as Coal, Natural Gas, Chromite, Crude Oil and Barytes witnessed the growth of 8.34, 3.45, 25.7, 4.48 and 162.5 percent, respectively. Further details of the extraction of principal minerals are given in the table 3.11.

Table 3.11: Extraction of Principal Minerals

Minerals	Unit of Quantity	2018-19	2019-20	2020-21	July-March		%Change
					2020-21	2021-22*	FY22/FY21
Coal	000 M.T	5,407	8,428	9,230	6,798	7,365	8.34
Natural Gas	000 M.CU.Mtr	40.68	37.29	36.22	27.25	28.2	3.45
Crude Oil	M.Barrels	32.50	28.09	27.56	20.77	21.70	4.48
Chromite	000 M.T	138	121	134	101	127	25.74
Magnesite	000 M.T	43	16	15	13	6	-52.30
Dolomite	000 M.T	472	302	388	335	325	-3.03
Gypsum	000 M.T	2,518	2,150	2527	955	1,232	-36.98
Lime Stone	000 M.T	75,596	65,810	76,632	59,366	39,581	-33.33
Rock Salt	000 M.T	3,799	3,369	3,366	2,686	2, 037	-24.16
Sulphur	000 M.T	21	20	19	15	12	-16.80
Barytes	000 M.T	116	55	52	32	84	162.50
Iron Ore	000 M.T	627	574	806	611	620	1.55
Soap Stone	000 M.T	157	150	289	241	259	7.47
Marble	000 M.T	7,736	5,797	7917	6,204	4,781	-22.94
Ocher	000 M.T	81	132	107	87	65	-25.46

*: Provisional
Source: Pakistan Bureau of Statistics (PBS)

Each province has its own Mines and Minerals Department which is responsible for exploration, exploitation, and investment promotion of mineral endowments in provinces. Besides, the departments also contribute to the tax and non-tax revenue[5] of the government. Efforts are being made for scientific exploration and exploitation of the

[5] Punjab has contributed a handsome amount of Rs 41.83 billion as non-tax revenue during last five years.

mineral resources in all provinces. Government has given prompt attention towards the development of minerals. Following initiatives have been taken during the period of July-March FY2022.

Major Initiatives of Punjab:

- Issuance of NOC(s) to 25 cement companies for grant of exploration licenses of limestone for installation of cement plants.
- 13 exploration licenses of rock salt have been granted for installation of Salt-based Industrial Plants.
- Establishment of Citizen Contact Center in collaboration with Punjab IT Board.
- Amendment in Punjab Mining Concession Rules 2002 in process.
- Drafting of Punjab Mines & Minerals Regulation Act 2022
- Initiatives/Project under Women in Mining.

Major Initiatives of Khyber Pakhtunkhwa

- Mining Cadastral System has been launched for online application process to enhance transparency in award of mineral titles, promote ease of doing business and facilitate investors in searching free mineral bearing areas.
- Under actions against idle leases, a total of 825 idle Mineral Titles has been identified against which legal proceedings have been started.
- Granite Zone Scheme in Dir Lower to be established and is in process of selecting/identifying a suitable site for granite zone.
- To undertake mapping across province, Geological mapping have been awarded to GSP.

Major Initiatives of Sindh

- Environmental Mapping of Mining areas of Sindh for the conservation of Minerals & Natural Resources has been initiated to develop a base map using high resolution latest satellite imageries.
- Feasibility study of Granite Deposits in District Tharparkar Sindh has been completed to explore and evaluate the resources to facilitate investors.
- The department intends to discover new minerals in Sind. For the purpose, a profile study for Identified Minerals for Reserves Estimation in Province of Sindh to be conducted in entire province.

Major Initiatives of Balochistan

- A project has been initiated in the name of *"Automation of Royalty Regime in Mining Sector"* to automate all the systems of the Department including License Management System, Rahdari/Challan Management System, Royalty Management System, Litigation and Inspection Module, etc. The online dash board will benefit investors and provide one window operation to thousands of investors and mine owners.

- Several Mineral Titles and Concessions were held without any development, exploration or mining activity. Therefore, the Department initiated action against such concessions/titles and cancelled more than 100 expired/idle concessions/titles which have now become free for serious investors.
- The Government of Balochistan has enacted two companies in the name of Balochistan Mineral Exploration Company (BMEC) and Balochistan Mineral Resources Limited (BMRL). Both companies have been granted exploration licenses. During the current fiscal year BMRL has been granted Reconnaissance License (RL) for Solar Salt for which international investor has approached the company for Joint Venture which will pave the way for mining of solar salt on large scale for the first time in the province.
- The Department has initiated project "Capacity Building of the Officers of Mines & Minerals Development Department" under which 24 officers were given financial and management training at IBA Karachi in October 2021.

3.7 Conclusion

Accommodative fiscal and monetary measures continued in FY2022 provided incentives to the businesses to perform better. Thus, LSM picked up the momentum and staged the overall growth of 10.4 percent during July-March FY2022. The performance was broad based on the back of strong growth of high weighted sectors such as textile, food, wearing apparel, chemicals, automobile, tobacco, and iron & steel products. It is also pertinent to mention here that operationalization of special economic zones under CPEC in Nowshera, Pishin and Faisalabad further paved the way for fast tracked industrial development which is pivotal to achieve inclusive and sustainable economic growth.

Supply-side disruptions which were originated from pandemic still in place due to emergence of new variants. Ukraine-Russia conflict has further escalated this disruption. Thus, internationally commodity prices are increasing significantly along with intense uncertainty in the market confidence. All these may result in severe challenges in LSM performance as industrial production is mainly dependent on import of capital goods. Thus, the future prospects of industrial sector are uncertain as risks still prevails owing to geopolitical environment, surge in energy prices, and new variants.