CHAPTER 03

Manufacturing and Mining

3.1 Introduction

Manufacturing is the second largest sector of the economy accounting for 13.6 percent of Gross Domestic Product (GDP). This sectors mainly comprises textile industry, engineering goods and industry, agro based industry, chemical industry and small & medium enterprises. This sector provides employment opportunities of 15.3 percent to the total labor force.

Large Scale Manufacturing (LSM) at 10.9 percent of GDP dominates the overall sector, accounting for 80 percent of the sectoral share followed by Small Scale Manufacturing, which accounts for 1.8 percent of total GDP. The third component of the sector is slaughtering and accounts for 0.9 percent of overall GDP.

The growth of this sector is contingent on better availability of utility services, enabling environment, credit to private sector, Foreign Direct Investment (FDI), capital market gains etc. This sector suffered in the past due to non availability of the desired inputs for its growth. The major issue which hampered its growth was the power shortages. The present government has made focused efforts to resolve this issue and developed a road map to overcome the power crises on fast track and on a sustainable basis. As a result, this sector started picking up its growth and contributed in overall economic growth.

The overall manufacturing sector continued to maintain its growth momentum with more vigor during the current fiscal year. Manufacturing sub component of industrial sector recorded an impressive growth of 5.0 percent against 3.9 percent of last year which helped overall industrial sector to improve by 6.8 percent against 4.8 percent last year.

The Large Scale Manufacturing (LSM) during July-March FY 2016 registered a growth of 4.70 percent as compared to 2.81 percent in the same period last year. On Year on Year (YoY), LSM grew by 6.75 percent in March 2016 compared to 5.80 percent of March 2015. The production data of Large Scale Manufacturing (LSM) received from the Oil Companies Advisory Committee (OCAC) comprising 11 items, Ministry of Industries and Production 36 items and Provincial Bureau of Statistics 65 items have contributed in LSM growth by 0.26 percent, 2.96 and 1.48 percent, respectively.

The Year on Year performance of LSM sector over corresponding period of last year is given in graph below.

Fig-1: 2014-15 (LSM Year on Year Growth Rate)

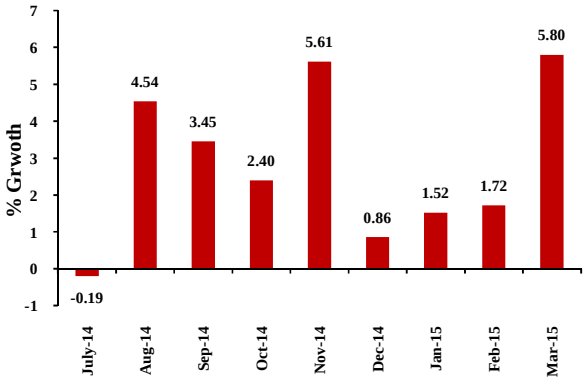
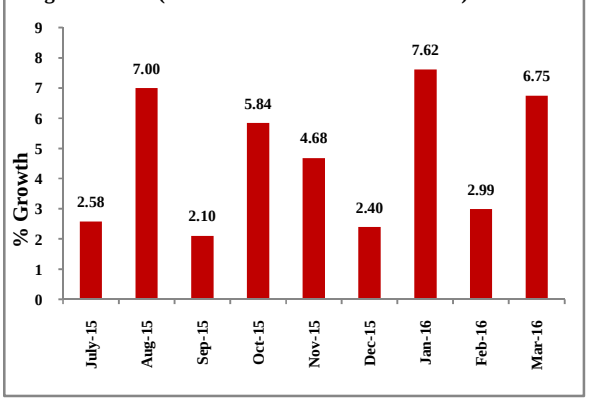


Fig-2: 2015-16 (LSM Year on Year Growth Rate)



The industry specific data shows that Automobiles recorded highest growth of 23.43 percent (compared to 17.06 percent last year), Fertilizers 15.92 percent (compared to 0.95 percent last year), Chemicals 10.01 percent (compared to 6.67 percent last year), Rubber Products 11.68 percent (compared to 1.88 percent last year), Leather products 12.18 percent (compared to 9.11 percent last year), Pharmaceuticals 7.21 percent (compared to 6.84 percent last year), Non Metallic mineral products 10.23 percent (compared to 2.71 percent last year), Food, Beverages & Tobacco 3.66 percent (compared to -0.93 percent last year), Coke & Petroleum Products 2.40 percent (compared to 5.47 percent last year) and Textile 0.62 percent (compared to 0.97 percent last year).

The other sectors that showed decline included Wood Product (58.03 percent), Engineering Products (17.64 percent), Paper and Board (2.90 percent), Electronics (9.98 percent) and Iron & Steel products (7.48 percent).

In March 2016, however, highest increased was recorded in Non metallic mineral product 20.61 percent, Food, Beverages & Tobacco 17.77 percent, Fertilizers 14.88 percent, Rubber product 12.00 percent, Paper & Board 9.26 percent, Pharmaceuticals 8.54 percent and Chemical 0.75 percent.

Group wise growth and points contribution of LSM for the period of July-March FY 2015 versus July-March FY 2016 are given in the following Table-3.1.

Table 3.1: Group wise growth and Point Contribution of LSM during the period of Jul-March 2015-16 Vs Jul-March 2014-15

S.No.	Groups	Weights	% Change		% Point Contribution	
			July-March		July-March	
			2014-15	2015-16	2014-15	2015-16
1	Textile	20.915	0.97	0.62	0.20	0.13
2	Food, Beverages & Tobacco	12.370	-0.93	3.66	-0.12	0.45
3	Coke & Petroleum Products	5.514	5.47	2.40	0.30	0.13
4	Pharmaceuticals	3.620	6.84	7.21	0.25	0.26
5	Chemicals	1.717	6.67	10.01	0.11	0.17
6	Automobiles	4.613	17.06	23.43	0.79	1.08
7	Iron & Steel Products	5.392	35.63	-7.48	1.92	-0.40
8	Fertilizers	4.441	0.95	15.92	0.04	0.71
9	Electronics	1.963	8.51	-9.98	0.17	-0.20
10	Leather Products	0.859	9.11	12.18	0.08	0.10
11	Paper & Board	2.314	-5.74	-2.90	-0.13	-0.07
12	Engineering Products	0.400	-10.74	-17.64	-0.04	-0.07
13	Rubber Products	0.262	1.88	11.68	0.00	0.03
14	Non-Metallic Mineral Products	5.364	2.71	10.23	0.15	0.55
15	Wood Products	0.588	-78.46	-58.03	-0.46	-0.34

Source: Pakistan Bureau of Statistics (PBS)

LSM broad based growth is achieved despite a drag from delay growth came from sugar and closure of Pakistan Steel Mills (PSM) since July 2015 when Sui Southern Gas Company (SSGC) suspended the gas supply due to non-payment of bills. The sugar industry started giving positive growth results in March 2016 at 32.71 percent compared to 18.75 percent in March 2015 after witnessing a negative growth during last month. The decline in global commodity prices benefited many industries such as food, automobile, cement and chemical and in addition construction activities, Punjab government Apna Rozgar Scheme and improved availability of gas supplies facilitated fertilizer and cement sector. The LSM sector will further gain momentum from the development work on projects under China-Pakistan Economic Corridor (CPEC) going forward. The Overseas Investors Chamber of Commerce and Industry (OICCI) in its latest business survey stated that improvements in energy management and law and order have led to

an upturn in confidence of the business community as the Business Confidence Index (BCI) — Wave 12 — touched a record level of 36 percent, showing an improvement of 14 percent over the previous survey result announced in November 2015.

The LSM sector also benefitted from the continued improvement in the supply of electricity and gas coupled with expansion in credit to private sector. The expansion in credit to private sector remained high due to lower cost of credit and better market conditions. A welcome development is the rise in the net credit disbursement for fixed investment. It appeared that many firms are expanding their operations by availing fixed investment loan. Credit for fixed investment reached to Rs. 150.147 billion (increased by 78 percent) during July-March, FY 2016 against Rs. 84.365 billion in comparable period of FY 2015. The expansion was particularly notable in sugar, fertilizer, pharmaceutical, telecommunication, road transport, construction of roads, manufacturing of electricity distribution, machinery, cement, chemical sectors etc.

The Automobile sector recorded a growth of 23.43 percent during July-March FY2016 compared to 17.06 percent in same period last year. The growth is mainly arrived from LCVs production which increased by 68.53 percent, Buses 81.95 percent, Jeeps & cars 29.73 percent, Trucks 41.68 percent and Motor cycles 17.22 percent. The only decline witnessed in the production of tractors which declined by 38.63 percent. The improvement in the automobile sector is due to stable exchange rate, continuation of concessional Apna Rozgar scheme launched by the Punjab government, appetite of new model and focus of commercial banks on auto financing. The demand for commercial vehicles particularly trucks will be further enhanced under CPEC.

The improvement in gas supply to fertilizer sector led to a strong growth of 15.92 percent during July-March FY2016. The growth of Chemical sector recorded at 10.01 percent during the period under review mainly arrived from Sulphuric acid which recorded growth of 25.75 percent, Paints & Varnishes(S) 21.18 percent and Caustic soda 26.85 percent. The exceptionally well performance mainly arrived due to construction activities and start of commercial operation by caustic soda producing unit.

In Pharmaceuticals groups, Capsules, Injections, Liquids/ Syrups and Tablets recorded a growth of 7.59 percent, 10.66 percent, 10.68 percent and 3.66 percent, respectively. In Non metallic mineral products, cement managed to grew by 10.41 percent during July-March FY 2016 and 7.7 percent in March 2016 over February 2016. The steep fall of global coal prices helped cement manufacturers. In addition Cement industry also benefitted through vibrant construction activities and reduction in policy rate. Growth in construction allied industries stems primarily from consistently rising public spending. The PSDP increased to Rs. 700 billion in FY 2016 compared to Rs. 350 billion in FY 2013 showing a growth of 100 percent, which helped projects related to infrastructure, power generation and development of railways, construction and allied industries. Coke and Petroleum products growth mainly arrived from the production of LPG 17.27 percent, Lubricating oil 16.85 percent, Motor sprits 2.23 percent and Jet oil 6.96 percent.

The Food, Beverages & Tobacco remained under stress mainly due to delay in cane crushing during this season. However, some items showed positive growth during July-March FY2016 which included tea blended which grew by 13.83 percent, soft drinks 4.14 percent, cooking oil 8.44 percent, vegetable ghee 6.12 percent, Sugar 2.85 percent and juices, syrups & squashes 2.93 percent. However, the sugar recorded growth on Year on Year (YoY) basis at 32.71 percent in March 2016 and Month on Month (MoM) basis 23.1 percent, which augur well for Food, Beverages & Tobacco group during the remaining months of the current fiscal year. The performance of Textile sector having highest weight in Quantum Index of Manufacturing (QIM) remained subdued on account of lackluster demand due to slowdown in economic growth in trading partners more specifically, China along with decline in the domestic cotton production.

However, to maintain the supply chain for textile sector, the import of raw cotton during July-March FY 2016 remained high at 345.363 thousand tons compare to 97.354 thousand tons during the same period of last year showing a growth of 254.75 percent in quantity and in value terms 161.85 percent (US $ 588.236 million against US $ 224.647 million).

Item wise review of production of selected items of Large Scale Manufacturing during July-March FY 2016 is given in Table-3.2.

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

S.No.	Items	Unit	Weight	July-March		% Change (Jul-Mar) 2015-16	% Point Contribution (Jul-Mar) 2015-16
				2014-15	2015-16		
1	Deep Freezers	(Nos.)	0.162	56,294	47,987	-14.76	-0.02
2	Jeep & Cars	(Nos.)	2.818	106,135	137,688	29.73	0.84
3	Refrigerators	(Nos.)	0.239	1,003,795	968,418	-3.52	-0.01
4	Upper Leather	(000 sq.m.)	0.392	18,371	18,898	2.87	0.01
5	Cement	(000 tones)	5.299	23,459	25,900	10.41	0.55
6	Liquids/Syrups	(000 Liters)	1.136	73,424	81,264	10.68	0.12
7	Phosphatic Fertilizer	(N tones)	0.400	442,164	499,412	12.95	0.05
8	Tablets	(000 Nos)	1.914	19,720,173	20,441,036	3.66	0.07
9	Cooking Oil	(Tones)	2.227	268,679	291,361	8.44	0.19
10	Nitrogenous Fertilizer	(N tones)	4.041	1,940,098	2,256,438	16.31	0.66
11	Cotton Cloth	(000 sq.m.)	7.186	776,900	780,233	0.43	0.03
12	Vegetable Ghee	(000 tones)	1.144	877,467	931,179	6.12	0.07
13	Cotton Yarn	(tones)	12.965	2,513,821	2,552,654	1.54	0.20
14	Sugar	(tones)	3.545	4,812,408	4,949,653	2.85	0.10
15	Tea Blended	(tones)	0.382	92,129	104,871	13.83	0.05
16	Petroleum products	(000 Liters)	5.410	10,317,669	10,763,101	4.32	0.23
17	Cigarettes	(Million Nos.)	2.125	46,790	42,892	-8.33	-0.18
18	Coke	(Tones)	0.104	190,794	57,394	-69.92	-0.07
19	Pig iron	(Tones)	1.584	195,741	1,509	-99.23	-1.57

Source: Pakistan Bureau of Statistics (PBS)

The production trends of items in Large Scale Manufacturing (LSM) sector during July-March FY2016 compared to same period of last year is given below.

Fig-3: Monthly Production trends of major Large Scale Manufacturing (LSM) sector items during the July-March 2015-16 compared to corresponding period July-March 2014-15

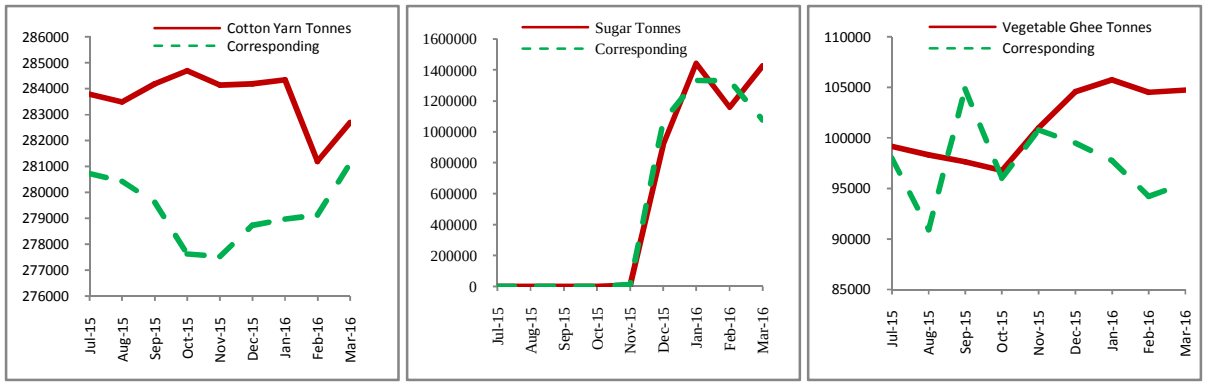


Fig-3: Monthly Production trends of major Large Scale Manufacturing (LSM) sector items during the July-March 2015-16 compared to corresponding period July-March 2014-15

The macroeconomic strategy achieved during the year along with improved security situation helped many industry to perform better.

3.2 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. The sector contributes nearly one-fourth industrial value-added, provides employment to about 40 percent of industrial labor force, and consumes about 40 percent of banking credit. Barring seasonal and cyclical fluctuations, textiles products have maintained the share of about 60 percent in national exports. The export performance during the period under review is given in the Table 3.3.

Table 3.3: Export of Pakistan Textiles (US$ Millions)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 (Jul-Mar)
Cotton & Cotton textiles	9,308	9,754	13,147	11,778	12,652	13,143	12,992	9,066
Synthetic textiles	319	446	608	546	406	383	331	222
Wool & woolen textiles	145	137	132	121	122	125	119	74
Total textiles	9,772	10,337	13,887	12,445	13,180	13,857	13,590	9,438
Total exports	17,782	19,290	24,810	23,624	24,515	25,131	23,885	15,606
Textile as % of Exports	55	54	56	53	54	55	57	60

Source: Ministry of Textile

3.2.1 Ancillary Textile Industry

The ancillary textile industry includes cotton spinning, cotton cloth, cotton yarn, cotton fabric, fabric processing, home textiles, towels, hosiery and 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 Textile Commission Organization (TCO), it is comprised of 523 textile units (40 composite units and 483 spinning units) with 13.269 million spindles and 185 thousand rotors installed and 11.083 million spindles and 140 thousands rotors in operation with capacity utilization of 84 percent and 76 percent respectively, during July –Mar FY 2016.

ii. Cloth Sector

There are three different sub-sectors in weaving viz, Integrated, Independent Weaving Units, and Power loom units. There is investment in the shuttle-less looms both in integrated and independent weaving sector. This trend is likely to intensify in the country. The power loom sector modernized and registered a phenomenal growth over the last two decades. The growth of power loom sector is due to favorable government policies as well as market forces. The production in Non-Mills Sector is not reported and therefore is estimated. The Table 3.4 shows production and export of clothing during the period under review.

Table 3.4: Production and export of Clothing Sector

Production	July-March 2015-16	July-March 2014-15	% Change
Mill Sector (M. Sq. Mtrs.)	780.233	776.900	0.42
Non Mill Sector (M. Sq. Mtrs.)	6091.972	6063.949	0.46
Total	6872.205	6840.849	0.45
Cloth Exports			
Quantity (M.SqMtr.)	1606.092	1566.777	2.51
Value (M.US$)	1685.470	1875.705	-10.14

Source: Ministry of Textile

iii. Textile Made-Up Sector

Being value added segment of textile industry made-up sector comprises different sub groups 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-Mar FY 2016 is presented in Table 3.5.

Table 3.5: Export of Textile Made-Ups			
	July-March 2015-16	July-March 2014-15	% Change
Hosiery Knitwear			
Quantity (M.Doz)	86.338	78.706	9.70
Value (M.US$)	1749.763	1787.279	-2.10
Readymade Garments			
Quantity (M.Doz)	23.472	23.111	1.56
Value (M.US$)	1609.452	1544.530	4.20
Towels			
Quantity (M.Doz)	131.429	127.444	3.13
Value (M.US$)	591.722	590.467	0.21
Tents/Canvas			
Quantity (M.Doz)	26.976	37.381	-27.83
Value (M.US$)	75.427	104.600	-27.89
Bed Wears			
Quantity (M.Doz)	243.293	241.646	0.68
Value (M.US$)	1505.484	1570.390	-4.13
Other Made up			
Value (M.US$)	471.266	488.180	-3.46
Source: Ministry of Textile			

a. Hosiery Industry

There are about 13,372 circular knitting machines, 10,646 flat knitting and 23,241 socks knitting machines spread all over the country. The capacity utilization is approximately 70 percent. There is greater reliance on the development of this industry as there is substantial value addition in the form of knitwear. Besides locally manufactured machinery, liberal import of machinery under different modes is also being made and the capacity based on exports is being developed.

The performance of this sector during July-March FY2016 suggested that knitwear production was 86.338 thousand dozen compared to 78.706 thousand dozen last year showing a growth of 9.70 percent. Knitwear worth $ 1749.763 million was exported as compared to $ 1787.279 million showing decline of 2.10 percent. The earning compared to last year was due to lower commodity prices globally. The export performance of knitwear during the period under review is given below in Table.3.6.

Table 3.6: Export of Knitwear			
	July-Mar 2015-16	July-Mar 2014-15	% Change
Quantity (000.Doz)	86.338	78.706	9.70
Value (M.US$)	1749.763	1787.279	-2.10
Source: Ministry of Textile			

b. Readymade Garment Industry

Readymade garment industry has emerged as one of the important small scale industries in Pakistan. Its products have higher demand both domestically and globally. The local requirements of readymade garments are almost met by this industry. Garment industry is also a good source of providing employment opportunities to a large number of people at a very low capital investment.

Generally export earnings from garments have increased significantly. Exports increased from 23.111 million dozens in various types of readymade garments worth US$ 1544.530 million in FY 2015 to compare to 23.472 million dozens worth $1609.452 million in FY 2016, showing an increase of 4.20 percent in terms of value and 1.56 percent in term of quantity.

Table 3.7: Export of Readymade Garments			
	July-Mar 2015-16	July-Mar 2014-15	% Change
Quantity (M.Doz)	23.472	23.111	1.56
Value (M.US$)	1609.452	1544.530	4.20
Source: Ministry of Textile			

c. Towel Industry

There are about 10,000 towel looms including shuttle and shuttle less in the country in both organized and unorganized sector. This industry is

dominantly export based and its growth has all the time depended on export outlets. The existing towels manufacturing factories have been upgraded to produce higher value towels. During July-March FY2016, exports in term of quantity recorded at 131.429 million kg as compared to 127.444 million kg showing an increase of 3.13 percent. Export performance of towel sector during the period is given below in Table 3.8.

Table 3.8: Export performance of Towel sector

	July-Mar 2015-16	July-Mar 2014-15	% Change
Quantity (M.Kgs)	131.429	127.444	3.13
Value (M.US$)	591.722	590.467	0.21

Source: Ministry of Textile

d. Canvas

The production capacity of this sector is more than 100 million Sq. meters. This sector is also known as Raw Cotton Consuming sector. Pakistan is the cheapest source of supply of Tents and Canvas. The export of this sector during July-March FY2016 recorded at $ 75.427 million as compared to the $ 104.600 million in comparable period last year, thus showing a decrease of 27.89 percent. In term of quantity during July-March FY2016 it recorded at 26.976 thousand dozen as compare to 37.381 thousand dozen and recorded a decline of 27.83 percent.

Table 3.9: Export performance of Tent and Canvas Sector

	July-Mar 2015-16	July-Mar 2014-15	% Change
Quantity (000.Doz)	26.976	37.381	-27.83
Value (M.US$)	75.427	104.600	-27.89

Source: Ministry of Textile

iv) Synthetic textile fabrics

During July-March FY2016, synthetic textile fabrics worth $ 222.163 million were exported as compared to $ 255.674 million showing a decline of 13.1 percent as compared to last year. Even in Quantity term the exports of synthetic decreased by 6.4 percent.

v) Woolen industry

The main products manufactured by the woolen industry are carpets and rugs. During July-March FY 2016, carpets and rugs worth $ 74.027 million were exported as compared to $ 92.924 million showing a decrease of 20.34 percent. In Quantity term the export of carpets and rugs also decreased by 26.53 percent. The exports of carpets during the period July-March FY2016 is given in the Table 3.10.

Table 3.10: Exports of Carpets and Rugs (Woolen)

	July-Mar 2015-16	July-Mar 2014-15	% Change
Quantity (M.Sq.Mtr)	1.415	1.926	-26.53
Value (M.US$)	74.027	92.924	-20.34

Source: Ministry of Textile

vi) 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 3.11.

Table 3.11: Installed and working capacity of Jute

	Jul-Mar 2015-16	Jul-Mar 2014-15	% Change
Total No. of Units	10	10	0
Spindles Installed	24272	24544	1
Spindles Worked	12976	22305	-42
Looms Installed	1134	1092	4
Looms Worked	568	871	-35

Source: Ministry of Textile

The production of the Jute goods during Jul-March FY2016 and last year was 45,402 and 71,670 metric tons, respectively showing a decrease of 37 percent.

The textiles sector in Pakistan is affected by a number of exogenous and indigenous factors such as low cotton production, lower international cotton prices on event of global economic slowdown, and increasingly stringent buyers conditionality. However, on other hand, value-added garments sector has grown marginally due to its limited product range, less usage of manmade fibers and inability of manufacturing units to restructure them to meet changing international requirements.

To help textile sector the federal government has announced Textile Policy 2014-2019 in February

2015. The package carries special duty-drawback rates, duty exemption on plants and machinery, subsidy on long-term loans and development subsidies. The policy offered Rs. 64.15 billion cash subsidy to the textile and clothing sector to boost exports to $26 billion by 2019 from $13 billion.

3.3 Other Industries

3.3-1 Engineering Sector

Engineering Development Board (EDB) is an apex government body under Ministry of Industries & Production entrusted to strengthen engineering base in Pakistan. EDB focuses primarily on the development of engineering goods and services sector on modern lines enabling it to become technologically sound and globally integrated. Engineering Development Board has so far taken the following initiatives.

4th Industrial minerals, steel, downstream engineering industries conference and exhibition (2015):

Engineering Development Board (EDB) in the conference "4th Industrial Minerals, Steel, Downstream engineering industries at Lahore" in October 2015 highlighted the fact that although growth in our steel industry has been relatively slower but downstream engineering industry has progressed with good pace thus building a base for producing value added industrial products like automobile and parts, electrical machinery/ equipment, consumer durables, pipes valves etc. The objective is to utilize the available resources of the country in the most effective manner in order to maximize the engineering productivity as well as its share in the exports. These industrial sectors have shown exponential growth and are ready to adopt new technologies and build their capacities/capabilities to meet the emerging challenges of globalization. The enabling environment, supported by the government's policies has been instrumental in development and growth of the industrial sector to the present level. The EDB is working hard to complement the Government of Pakistan efforts through policy inventions and hand holding of various sectors.

Pakistan Investment Conference:

The 2nd Pakistan investment conference, organized by the Board of Investment held in November, 2015 in Islamabad inaugurated by Prime Minister of Pakistan and the concluding session was presided over by Federal Minister for Finance and Revenue. Sixty seven (67) diplomats including commercial counselors of foreign missions in Islamabad also participated in the conference. The conference provided a great opportunity to 650 foreign and Pakistani businessmen and investors of 29 participating countries and local investors to gather information and interact with each other to explore joint venture business and investment opportunities in various sectors. Separate stalls were set up by the Provincial Board of Investment to showcase their respective products. Eight focused sectoral sessions participated by both public and private sector panelists deliberated in detail on Energy, Water & Power, Oil & Gas, Agriculture & Livestock, Textile & Garments sectors and SEZs initiative and Investment Policy for investment in these areas.

Engineering Development Board gave a detailed presentation to the potential investors highlighting the existing vast investment opportunities in different sectors of the equipment, light engineering and related incentive-pioneer industry regime etc. After the Conference, BOI has been receiving a large number of business proposals and quarries from the participants.

3.3-2 Automobile Industry

In automobile sector, there has been surge in productions of all its sub sectors except the farm tractors and jeeps during the period July-March FY 2016. Remarkable growth has been witnessed in buses which is recorded at 82 percent, LCVs 68.5 percent, Trucks 41.6 percent, Cars 30.2 percent and two/three wheelers 21 percent during July-March FY 2016 as compared to corresponding period last year. However, during July-March FY 2016, farms tractors and jeeps production declined by 38.6 percent and 28.4 percent, respectively.

The sales of passenger cars and pickups increased due to lowest ever financing rates, improved real incomes and better economic and security conditions. The current year's figures also show a boost in the sales which were due to Apna Rozgar

Scheme by Government of Punjab. The scheme came to close in March 2016 after running for nearly sixteen months and uplifting about 50000 units of vans and pickups. In case of LCVs, 68.5 percent growth on account of the increased sales of pickups during the period under the said scheme.

Trucks also witnessed a growth of 41.6 percent and sales of 37.5 percent on account of measures taken by the government such as combination of stringent enforcement actions and policy interventions; whereby disguised/mis-declared import of trucks could be curbed. The situation would further improve with expected imposition of age limit on import of used trucks.

The remarkable growth in buses recorded at 82 percent is due to high demand by the transporters on account of improvement in network of roads. The locally produced buses are being offered at highly competitive prices despite imposition of sales tax, compared to the prices of imported buses. Besides the service and maintenance are not the issues with the local product compared to the imported ones.

The two/three wheeler sector continued its growth since 2001. Motivated by market expansion new entrant of international standing also entered into the market and have set up a new manufacturing plant. Nevertheless, there were closures and production losses at several units, however, the overall growth stayed at 20 percent.

Table below shows comparative position of the production during the year July-March FY 2016 and FY2015.

Table 3.12. Production of Automotive Industry **No of units produced**

Category	Installed Capacity	2014-15 (July-Mar)	2015-16 (July-Mar)	% Change
Cars	240,000	105,267	137,067	30.2
LCVs	43,900	17,521	29,529	68.5
Jeeps	5,000	868	621	-28.4
Buses	5,000	410	746	82
Trucks	28,500	2,781	3,940	41.6
Farm Tractors	65,000	35,753	21,942	-38.6
Two/Three Wheelers	2,500,000	811,459	982,423	21

Source: Pakistan Automotive Manufacturer Association

Box 3.1: Automotive Development Policy (ADP) 2016-21

The Government of Pakistan has announced Automotive Development Policy (ADP) 2016-21 in March 2016. A Committee constituted by the Economic Coordination Committee of Cabinet has formulated the Automotive Development Policy (2016-21) which envisages development plans for the automobile industry in the country to facilitate higher volumes, attract investment, ensure enhanced competition and offer higher quality in line with emerging opportunities within the country and in the region and to create a balance between industrial growth and tariffs to ensure sustainability for all stakeholders and attaching prime importance to consumer welfare. In addition, the policy provides consistency and predictability for new investors with a mid-term policy review mechanism to cater for emerging developments to achieve car production of over 350,000 by the year 2021. The salient features of the policy are:

i. Lower the entry threshold for New Investment;
ii. Create enabling tariff structure for development of the Automotive Sector;
iii. Rationalize automobile import policy;
iv. Provide regulatory and enforcement mechanisms for Quality, Safety and Environmental Standards;
v. Establishment of Pakistan Automotive Institute;
vi. Ensure Consumer Welfare through provision of quality, safety, choice and value for money;
vii. Other Interventions, and
viii. Reorganization of Auto Industry Development Committee (AIDC)

Goals

In consonance with the Vision of the ADP 2016-21, the following goals reflect future demand by

recognizing the need to restructure and modernize the Auto Industry to meet the increasing demand for quality product in future:

To increase automotive production gradually by 2021 to:

Cars/Van/Jeeps:	350,000
Light Commercial Vehicles (LCVs):	79,000
Trucks:	12,000
Buses:	2,200
Tractors:	88,000
Motorcycles:	2.5 million

- To increase contribution to the Gross Domestic Product from 2.3 percent to 3.8 percent;
- To increase contribution to manufacturing from 22 percent to 30 percent, and
- To increase direct and indirect employment from 2.4 million presently to 4 million.

3.3-3 Fertilizer Industry

The fertilizer industry has a significant role in the agricultural growth of the country. It has both forward and backward linkages in national economy. In Pakistan, there are nine urea manufacturing plants, one DAP, three NP, three SSP (18 percent), two CAN and one plant of blended NPKs having a total production capacity of 8,983 thousand product tonnes per annum. Although, the installed production capacity for all products has attained the level of 8,983 thousand tonnes per annum, the actual production for all products remained at 7,116 and 8010 (estimated) thousand product tonnes for 2014-15 and 2015-16 which is less by 20.8 and 10.8 percent respectively, than the installed production capacity. The entire fertilizer products are manufactured by the private sector.

Fertilizer sector is the fourth largest consumer of gas. Due to shortage of gas has disturbed the smooth supplies of natural gas to national fertilizer industry which resulted into low production, undue price hike, increase in imports and subsidy, and erosion of investment especially in case of urea. Now the addition of LNG as source of feed to three plants of Pak Arab Fertilizer Company since March 2015 has considerably increased the fertilizer production to 14.88 percent. At present, the installed production capacity (6323 thousand tonnes) of urea fertilizer is more than national demand of about 6000 thousand tonnes per annum but the actual production is below than their required level. The annual production of urea for 2015-16 is estimated as 5417 thousand tonnes, which is less by 14.3 percent of installed capacity of urea fertilizer.

3.3-4 Cement Industry

The cement industry gained from vibrant construction activities on account number of infrastructure and power related projects were taken up during the period under review. The PSDP spending increased from Rs. 350 billion in FY2013 to Rs. 700 billion in FY2016. The CPEC program is also creating demand of cement and allied materials.

During current fiscal year July-April 2015-16, the cement industry dispatches improved to 26.97 million tonnes in local market posting a healthy growth of 17.31 percent compared with 22.99 million tonnes last year. The growth situation during the current fiscal year improved to 9.7 percent compared to 3.9 percent last year. Encouragingly, in view of expected demand from development projects under PSDP and CPEC and ongoing housing schemes in the public and private sector, the cement industry is looking forward to expand its production capacity from existing level of 45.62 million tones to approximately 53 million tonnes in next two to three years.

Table 3.13: Cement Production Capacity & Dispatches **(Million Tonnes)**

Years	Production Capacity	Capacity Utilization (%)	Local Dispatches	Exports	Total Dispatches
2006-2007	30.50	79.23	21.03	3.23	24.26
2007-2008	37.68	80.14	22.58	7.72	30.30
2008-2009	42.28	74.05	20.33	10.98	31.31
2009-2010	45.34	75.46	23.57	10.65	34.22
2010-2011	42.37	74.17	22.00	9.43	31.43
2011-2012	44.64	72.83	23.95	8.57	32.52
2012-2013	44.64	74.89	25.06	8.37	33.43
2013-2014	44.64	76.79	26.15	8.14	34.28
July-April					
2014-15	45.62	76.49	22.99	6.08	29.08
2015-16	45.62	83.91	26.97	4.93	31.90

Source: All Pakistan Cement Manufacturers Association (APCMA)

The cement industry focusing on capacity expansion with an investment of $ 1 billion in view of ever growing demand within the domestic market as well as focus on export to market in the African region. Four companies have already announced their plans in this regard such as Cherat cement, Attock cement, DG Khan cement and Lucky cement.

3.5: Privatization Programme

Privatization is the corner stone of the government's economic reforms agenda. It is an important policy tool for generating growth and addressing structural imbalances by removing the artificial barriers and opening up the economy to competition. Privatization helps any economy to move towards liberalization, from controlled to competitive markets and from inefficient state owned enterprises to efficient private organizations with state of the art management systems and technologies equipped with the best international standards of corporate governance.

Pakistan is one of the first countries in the region to initiate deregulation and liberalization of the economy, and start the privatization process. PC has successfully managed to complete 172 privatization transactions, generating revenues worth Rs.648.972 billion, since the commission's inception in January, 1991.

In June 2013, the present government announced that one of its highest priorities is to turn around the loss making Public Sector Enterprises (the "PSE") by restructuring the entities with the assistance of strategic private sector partnership, which has the capacity to invest and provide capable management.

After a gap of nearly 6 years, the present government reinstalled the privatization programme in October 2013, when the Cabinet Committee on Privatization (CCoP) approved a list of 69 Public Sector Entities (PSEs) for privatization, including 31 PSEs in the privatization programme for early implementation. Subsequently, in June 2014, the CCoP approved 8 additional PSEs for early implementation. Accordingly, PC initiated the process for various PSEs in Banking, Oil & Gas, Insurance, Aviation and Power Sectors

Four capital market offerings have been successfully completed, namely United Bank Limited, Pakistan Petroleum Limited, Allied Bank Limited and Habib Bank Limited. Furthermore, the strategic sale of National Power Construction Corporation (Pvt.) Limited has also been successfully completed. In total, gross proceeds of Rs. 173 billion, including over USD 1.1 billion in Foreign Exchange, have been raised from these five completed transactions. Details of these completed transactions are provided in the Table 3.14.

Eighteen (18) privatization transactions are currently ongoing and are at different stages of the

strategic sale process. These include Pakistan International Airlines, Pakistan Steel Mills, State Life Insurance Corporation, SME Bank and the Power Sector entities.

Table 3.14: Detail of Transaction to date

Sr. No.	PSEs	Transaction Completion Date	Revenues		FX raised (USD)
			PKR	USD equivalent	
1.	United Bank Limited (UBL)	June 2014	Rs. 38.2 bn	$ 388 m	$ 315 m
2.	Pakistan Petroleum Limited (PPL)	June 2014	Rs. 15.4 bn	$ 153 m	-
3.	Allied Bank Limited (ABL)	December 2014	Rs. 14.4 bn	$ 144 m	$ 20 m
4.	Habib Bank Limited (HBL)	April 2015	Rs.102.4 bn	$ 1,005 m	$ 764 m
5.	National Power Construction Corp (NPCC)	August 2015	Rs. 2.5 bn	$ 25 m	$ 25 m
		Total	**Rs. 172.9 bn**	**$ 1,715 m**	**$ 1,124 m**

Source: Privatization Commission

The success of the privatization programme is contingent on the support of all the stakeholders, including the various government agencies, departments, organizations, regulatory authorities and most importantly the people of Pakistan.

3.6: Small and Medium Enterprises

Small and Medium Enterprises Development Authority (SMEDA) is an apex organization for development of the SME sector in Pakistan. It has an all-encompassing mandate towards fostering growth of SMEs along with a broad service portfolio spread across various SME sectors and clusters, skill development through training, industry support for productivity enhancement, business development services and collaborative projects with international development partners.

Salient activities/achievements of SMEDA during July-March FY 2016 are given below:-

i. SMEDA's Regular Business Development Support Services, Research & Advocacy

Walk-ins facilitated:	More than 4,400
Investment Facilitation:	Rs. 652.74 Million (Approx.)
Pre-feasibility Studies Developed:	21
Business Plans Developed:	11
Training Programs/workshops	165 programs, 5,370 participants
Cluster Profiles developed	6
District Profiles developed	8
SMEDA Newsletter (Quarterly):	3 Issues, containing information on SME development initiatives and guidance for SMEs
SME Observer (Bi-Annual):	1 Issue with 4 research articles for policy advocacy

ii. Prime Minister's Youth Business Loans (PMYBL)

- At the launch of PMYBL in 2013, Eight Five (85) Business Pre-feasibility Studies (also translated into Urdu) were developed along with information resources and tools including, FAQs on Pre-feasibility studies, Financial Calculators (4), Guidelines / Template on developing Business Plan, and Training Video Documentaries (7) developed on various aspects of business.
- 16.57 million Pre-feasibility studies and other tools and resources were downloaded from SMEDA website and 24,600 prospective loan applicants facilitated through SMEDA helpdesks after the launch of PMYBL. (1,399 prospective loan applicants have been facilitated and 1.22 million downloads were recorded during the period July-March FY2016).
- Information dissemination of PMYBL has been enhanced through SMEDA regular training programs across the country.

iii. Special Projects with international

development partners

SMEDA in collaboration with various international development agencies such as Japan International Cooperation agency (JICA), German International Cooperation (GIZ), Training and Development Centers of the Bavarian Employers Association (bfz), Germany and local experts, is providing technical assistance to SMEs across a range of industries to upgrade their skills and improve systems. Over 50 international Technical Experts have been engaged by SMEDA and demonstrated best practices for improving Productivity & Quality, reducing energy wastages and improving workplace environment of SME sectors.

The area covered under these projects includes industry support services, energy efficiency, technical support to Auto parts manufacturing industry and economic fertilization of KPK and FATA.

iv. SME Development Projects under Public Sector Development Program (PSDP)

SMEDA initiated efforts in infrastructural development and technological up gradation through undertaking projects financed by the PSDP. Currently, SMEDA is implementing five (05) PSDP projects at a total cost of Rs. 382.46 million.

v. SMEDA Establishment Sports Industries Development Centre (SIDC) to facilitate sports Sector

Pakistan's Sport Industry is known around the globe for its specialized world-class sports goods production, especially footballs. Sialkot alone caters to 70 percent demand of the hand stitched inflatable balls and produces 40 million balls annually. However, Sports goods sector, was facing a major threat in the form of "Mechanized inflatable ball", which uses medium end technology to produce a ball having most of the characteristics of hand stitched ball. SMEDA has facilitated the local football industry to enhance its share in the international market by establishing a Sports Industries Development Center (SIDC) at Sialkot through Public Sector Development Program (PSDP) at a total cost of Rs. 436 million. SIDC is a core initiative in the strategy of infusing Mechanized inflatable ball technology in the local industry.

vi. SMEDA-SBP Interaction to Accelerate SMEs Access to Finance

In order to create an environment that supports greater financial inclusion, the State Bank of Pakistan and SMEDA have collaborated through signing an MOU and have been engaged in various initiatives and programs. A few key initiatives undertaken during the period are as follows:

- **National Financial Inclusion Strategy (NFIS):** SME specific input was provided for the National Financial Inclusion Strategy, developed by the State Bank of Pakistan in collaboration with the World Bank. The government has approved the NFIS. SMEDA is a member of the Steering Committee of NFIS as well as Technical Committees on "Microfinance, Agriculture Finance & Housing Finance" and "SME Finance". Detailed action plans on the themes will be developed for increasing SMEs access to finance.
- **Capacity Building:** Training and awareness is a regular feature.
- **3S forum:** The State Bank of Pakistan has established an institutional committee with SMEDA and the Securities & Exchange Commission of Pakistan (SECP) to ensure a ready mechanism for information exchange and to propose recommendations for creating a facilitative regulatory environment for enhancing SMEs access to finance. Launching of venture capital funds for SMEs through Asset Management Companies (AMCs), exploring possibility for establishment of an SME rating agency and options for arranging credit lines to leasing companies are key areas where SBP, SECP and SMEDA propose to work together.

vii. Pakhtunkhwa Hunermand Rozgar Scheme (PHRS)

PHRSS is an employment scheme aiming to create new job opportunities and economic activities in KPK. Government of Khyber Pakhtunkhwa has initiated the scheme in

collaboration with Bank of Khyber (BOK). So far, the Bank of Khyber has approved loans of Rs. 750 million. SMEDA, in this regard, provides assistance to successful applicants in terms of capacity building and business development. During July-March FY 2016, Six(6) training programs have been conducted to facilitate loan applicants.

viii. SMEDA's Collaboration with Turkish SME Development Agency, KOSGEB

Small and Medium Enterprises Development Authority (SMDA) and Turkish Small and Medium Enterprises Development Organization (KOSGEB) signed a Memorandum of Understanding (MoU) for the promotion of SMEs of both countries. The flowing are the focus areas of this collaboration:

- Mutual business trips and exchange of teams for exposure
- Improving SMEs' commercial relations to encourage joint ventures
- Organization training programs for SMEs and related organizations
- Exploring opportunities in other third world countries for synergy
- Cooperation with international agencies to maximize utilization of funds
- Attracting Turkish investment for value addition in sectors with competitive advantage

ix. China-Pakistan Economic Corridor (CPEC)

The China-Pakistan Economic Corridor offers immense opportunities for achieving development objectives. SMEDA, in this regard, provided policy inputs on Draft Long Term Plan of China-Pakistan Economic Corridor (CPEC) to capture key areas to mobilize investment for the benefits for the SMEs sector of both countries. SMEDA proposed 70 direct interventions under 13 economic sectors for fast track development. The proposed interventions are based on SMEDA as 5 years SME Development Plan that has been included in Pakistan Vision 2025.

3.7: Mineral Sector

Pakistan is bestowed with all kinds of resources which also include mineral resources. Pakistan possesses a large number of industrial rocks, metallic and non-metallic which have not been evaluated. The mineral wealth of Pakistan contributes meagerly in GDP (3 percent). This is due to application of outdated management techniques, inadequate capital and antique technical know-how besides unsatisfactory law & order situation in the areas where major bulk of our mineral resources lie.

The Mining and Quarrying sector grew by 6.8 percent in FY 2016 as against 4.0 percent last year. Calcite, Rock Salt, Phosphate, Marble, Gypsum, Dolomite, Soap Stone, Lime Stone and Natural Gas posted a positive growth rate of 123.79 percent, 65.16 percent, 53.96 percent, 50.50 percent, 47.57 percent, 33.28 percent, 26.10 percent, 23.19 percent and 1.49 percent respectively. However, some witnessed negative growth rate during the period under review such as Magnesite 58.14 percent, Barytes 42.12 percent, Sulphur 37.18 percent, Crude oil 8.21 percent, Chromite 3.85 percent and Coal 0.66 percent. (Table 3.14).

Table 3.14: Extraction of Principal Minerals

Minerals	Unit of Quantity	2013-14	2014-15	2015-16	%Change FY16/FY15
Coal	M.T	3,311,240	3,402,028	3,379,601	-0.66
Natural Gas	MMCFT	1,493,686	1,465,759	1,487,548	1.49
Crude Oil	JSB(000)	31,584	34,490	316,59	-8.21
Chromite	M.T	83,447	98,939	95,128	-3.85
Magnesite	M.T	3,770	4,431	1,855	-58.14
Dolomite	M.T	592,918	223,117	297,368	33.28
Gypsum	M.T	1,322,059	1,417,007	2,091,117	47.57
Lime Stone	M.T	36,463,310	39,757,568	48,976,833	23.19
Rock Salt	M.T	2,220,347	2,136,361	3,528,403	65.16
Sulphur	M.T	35,672	19,730	12,395	-37.18

Table 3.14: Extraction of Principal Minerals

Minerals	Unit of Quantity	2013-14	2014-15	2015-16	%Change FY16/FY15
Barytes	M.T	132,433	118,568	68,626	-42.12
Calcite	M.T	436	1694	3,791	123.79
Soap Stone	M.T	72,234	101,039	127,408	26.10
Marble	M.T	2,591,401	2,597,082	3,908,532	50.50
Cooper	M.T	6,538	4,376	0	-100.00
Phosphate	M.T	87,806	84,606	130,259	53.96

Source: Pakistan Bureau of Statistics (PBS)

Punjab:

Punjab, being second largest (area-wise) province of the country, has vast mineral potential like coal, salt, iron ore, limestone, gypsum, silica sand and fire clay etc. Government of Punjab striving to follow a road map on mineral exploration projects.

- To enhance the contribution of mineral sector to GDP through improved production.
- To expand mining sector by focusing on exploration and evaluation of mineral resources.
- To enhance public sector investment on Resource Mapping, Geo-database Development and provision of physical infrastructure, roads and electricity etc. in the potential areas.
- To promote facilitation role of the government for the prospecting investor.
- To encourage and support exploration of minerals, particularly through private sector.
- To promote environment friendly mining practices and to take measures for mitigation of environmental hazards for sustainable development of mineral sector.

Government of Punjab has made following achievements.

I. Development of Mineral Sector Infrastructure

a) Geophysical Survey of Sub Surface Pre-Cambrian Shield Rocks in Punjab For Metallic Mineral Deposits

Presence of sufficient evidences of metallic minerals near Chiniot-Rajoa led the mines and minerals department to undertake regional and semi detailed geophysical survey of the area. Geological Survey of Pakistan (GSP) was engaged in May 2013, for in depth investigations to evaluate potentials of sub-surface deposits of metallic minerals in the Pre-Cambrian Indian Shield Rocks.

In the first phase, the entire region comprising over 28 topo sheets, spreading over about 18000 sq.km area was to be covered by semi-detailed magnetic survey to explore anomalous zones. On determination of anomalous zones, detailed investigations are to be carried out by integrated geophysical surveys, thereafter selected anomalous localities would have to be recommended for confirmatory drilling. Geological Survey of Pakistan (GSP) has completed the following task till December 2015.

- Semi-detailed magnetic survey on 28 topo sheets. Total magnetic survey data was recorded using Proton Precession Magnetometer, Geometric G856AX, and after applying necessary corrections prepared 2D contour maps using surfur-11.
- Thirty two (32) anomalous zones of different intensities were discovered,
- Three (3) out of thirty two (32) so far detected anomalies zones were selected for integrated geophysical surveys.
- Gravity, Magnetic and IP surveys on three selected anomalies near Wad Sayyiadan, GhuttiSayyiadan and ChakJhumra are completed.

b) Capacity Building & Strengthening of Directorate General of Mines & Minerals Punjab, Lahore

Capacity building is an evidence-driven process of

strengthening the abilities of individuals, organizations, and systems to perform core functions and to continue to improve and develop over time. For this purpose, purchase of new Gadgets, Software and training are the basic components. Contrary to the past, this time government has allocated handsome funds to introduce advance software of GIS techniques for preparation of mine database. Similarly, SURPAC Software, a most advance software used in advance countries for mineral resource estimation, 3D modeling, quarry and underground mine planning & design, scheduling for optimized mineral handling.

c) Development of physical infrastructure provision of electricity in mining area of district Khushab

District Khushab being central part of salt range is rich in mineral wealth and contributing substantial revenue to public exchequer. A reasonable proportion of local's population are working in mines/collieries and earning their livelihoods. The mining area located far flung from towns and smaller cities, therefore, deprived from basic amenities like electricity. Due to non-availability of electricity mine owners have to use diesel engine to run mining operations entailing high operational cost that discourages mechanization of mines. With the provision of electricity in mining areas, mining activity will boost manifold consequently provide opportunity to community to prosper.

II. Grant of large scale mining leases

Recently seven mining leases/licenses falling under Large Scale Mining have been granted to different companies including M/s. Asian Precious Minerals (PVT) Limited, M/s. I.C.I. (PVT) Limited, M/s. Lucky Cement, M/s. Jabal-e-Marjan, M/s. LEPAK Mining and M/s. National Marble involving investment of worth Rs. 40.2 billion. Similarly two exploration licenses for potash brine under Large Scale Mining have been granted to M/s. Asian Precious Minerals (PVT) Limited, where investment of Rs. 10.0 billion is expected.

III. Revenue receipts & mineral production

Mines & Minerals Department was given a target of Rs.4200 million during FY 2016 for collection of royalty on production of minerals from mining lease areas. The target will be achieved by the end of this fiscal year 2016.

IV. Legal review framework

Punjab mining concession rules were framed in 2002. Since then no legal review was made whereas drastic changes has occurred during this span of 13 years which demands its review to keep it abreast with the present need. After detailed deliberations, amendments under Minor Minerals chapter (Sand, Gravels and Sand Stone) has been completed and implemented. By virtue of this revision, concept of reserve price, blacklisting and number of holding limits has been introduced to curb monopolistic trend of sand/stone mafia and provided transparent environment for genuine investors. Similarly, Legal review of Large Scale Mining and Small Scale Mining is completed and is under consideration of Law Department for final scrutiny.

V. International seminar on business opportunities

Mines and Minerals department played an active role in conducting International seminar on business opportunities (ISBOP) 2015, and successfully signed thirteen MOU's with foreign and local companies on mining projects.

Benchmarks for 2016-2017

Apart from the ongoing scheme of capacity building and Geophysical Survey of sub-surface pre-cambrian shield rocks, following new schemes has been included for the next financial year 2016-17.

i. Mineral Resources potential of Punjab
   a) Energy Minerals
   b) Metallic Minerals
   c) Industrial Minerals
ii. Construction of road network to facilitate coal supply to power plant at Pind-Dadan khan District Jhelum.
iii. Identification of effective strategies to optimize coal production from Coal Mines in Salt Range/Trans Indus Range (District

Jehlum, Chakwal, Khushab and Mianwali), Punjab.

iv. Rock Salt potential blocks delineation in Salt Range, Punjab.

Khyber Pakhtunkhwa

The total area of Khyber Pakhtunkhwa is 74521 Sq Km out of which 70 percent consists of mountains and rocks. The formation of these rocks contains huge prospects of different metallic/non-metallic minerals and various precious/semi-precious gemstones and other minerals. It has vast mineral resources which were not being exploited to its full potential. Based on the exploration done so far, excellent prospects of findings and discovering other valuable deposits exists.

The major achievements of Minerals Development Department regarding welfare of the mine labors during 2016 were:

Plan, Strategies and Targets for 2016-17

- Work on up gradation of the existing Five (05), Mines Labour Welfare Dispensaries to Medical Centers.
- Establishment of new mines labour welfare dispensaries where needed.
- Establishment of water supply schemes in cluster of mine areas on need basis.
- Initiate work on establishment of recreational centers for mine labours in cluster of mine areas.
- Continuation of the scheme titled 'Reimbursement of expenditure incurred on medical treatment of mine labours throughout Khyber Pakhtunkhwa for patients of Cancer, Tuberculosis, Heart Diseases, Kidney Transplantation, Medical Health and other chronic diseases.
- Continuation of award of scholarships to children of mine labour in Khyber Pakhtunkhwa.
- Work on housing scheme (pre-fabricated building) at cluster of mine sites in the province.
- Continuation of the scheme titled 'Grant Aid to mine Owners/lease holders for maintenance of standard dispensary services.
- Initiation of the scheme titled 'full reimbursement of expenditure for artificial limbs to mine labours who lost limb(s) during work in mines.
- Provision of Transport Facility to mine labours from and to work places where needed.

Sindh

The mines and mineral department Government of Sindh regulate & monitor mining operations & activities in the mineral sector and also promotes joint ventures especially with foreign investors for development of coal resources of the province. The details of ongoing schemes are given below.

I. Appraisal of newly-discovered coal resources of the Badin Coal Field and its adjoining areas of Southern Sindh

- Drilling of two bore hole have been completed at the depth of 381.46 meters and 423 meters, encountered coal seams at different depth from 342.54 m to 380.24 m, with a cumulative thickness of coal, 6.17 meters and 5.00 meters, respectively.
- Core samples collected and their chemical analysis have been completed.
- Geological logging has been completed to the drilled depth.

II. Economic prospects of the Thar Desert Eolian Sand Block, Sindh

Forty four (44) samples collected from the Thar Desert; locations marked on satellite image and sent to geosciences lab, GSP Islamabad for XRF and XRD analysis. Results of sampled awaited as the next strategy will be developed on the basis of Lab report.

III. First-ever geological map of Sindh at 1:600,000 scales

The Geological Survey of Pakistan has published First ever Geological map of Sindh on 1:600,000 scales. Since the discovery of Thar coal field, several areas of Sindh has attained a significant importance in their stratigraphic settings and natural resources potential such as bentonite,

granite and celestite etc. It was quite difficult in the past to have a quick and easy access to these sources of information, mainly because of absence of a reliable data base. Now, the GSP has come up with this monumental work of research by compilation and updating of the previous work, the problem has been resolved to some extent. A reliable data base is pre-requisite to attract investment in the mineral sector. This latest map provides a solid foundation for such a data base.

Balochistan

Balochistan province has the major share in minerals being produced in Pakistan. Balochistan constitutes about 42 percent of the total national land and has been endowed by nature with substantial mineral wealth. The province's mineral potential is much bigger than the current production statistics. This gap between the potential and actual production is affected by law & order situation, absence of necessary infrastructure and lack of technical capacity for the mining. The Government of Balochistan is providing institutional arrangements but still there is dire need for the development of technologies for processing different indigenous ores to extract products of high commercial value which will bring socio-economic uplift and create job opportunities. Presently, more than 51 metallic and non metallic minerals have been discovered in the Balochistan province out of which 29 are being exploited including minerals such as chromite, copper, iron, lead, zinc, manganese, antimony and gold etc whereas the non metallic include barite, fluorite, calcite, magnesite, granite, coal and dimension stone such as marble both onyx & ordinary, granite, gabbro basalt and dunite etc.

MANUFACTURING AND MINING

TABLE 3.1

RESERVES AND EXTRACTION OF PRINCIPAL MINERALS

Minerals in 000 tonnes	Antimony (tonnes)	Argonite/ Marble	China Clay	Celestite (tonnes)	Chromite	Coal	Dolomite (tonnes)	Fire Clay	Fullers Earth	Gypsum Anhydrite	Lime Stone
Reserves Quantity		Very large Deposits	4.9 million tons	..	fairly large Deposits	185 billion tonnes	Very large Deposits	Over 100 million tons	fairly large Deposits	350 million tons	Very large Deposits
Years											
2000-01	95	620	47	807	22	3,285	352,689	164	13	364	10,870
2001-02	37	685	54	382	24	3,512	312,886	171	16	402	10,820
2002-03	-	1,066	40	402	31	3,609	340,864	117	15	424	11,880
2003-04	-	994	25	570	29	3,325	297,419	193	14	467	13,150
2004-05	5	1,280	38	1,855	56	3,367	199,653	254	17	552	14,857
2005-06	91	1,836	53	3,160	65	3,881	183,952	333	16	601	18,428
2006-07	119	1,980	31	1,530	104	3,702	342,463	347	12	624	25,512
2007-08	245	1,537	32	1,310	115	4,066	359,994	330	11	660	31,794
2008-09	75	1,145	17	470	90	3,679	249,918	389	10	800	33,186
2009-10	25	1,065	23	160	257	3,536	130,408	329	11	854	37,137
2010-11	25	1,133	16	-	148	3,292	240,111	274	4	885	32,021
2011-12	12	1,750	22	-	179	3,179	198,392	408	7	1,260	35,016
2012-13	89	2,360	23	-	136	2,813	335,819	455	4	1,250	38,932
2013-14	127	2,591	16	-	83	3,311	592,918	458	6	1,322	36,463
2014-15	114	2,520	19	-	99	3,402	223,117	406	8	1,417	39,758
Jul-Feb											
2014-15	80	1,389	12	-	58	2,200	188,454	254	4	948	25,214
2015-16 P	21	2,295	16	-	51	1,965	373,751	320	7	1,123	33,213

.. : Not available **(Contd.)**

P : Provisional

TABLE 3.1

RESERVES AND EXTRACTION OF PRINCIPAL MINERALS

(000 tonnes)

Minerals in 000 tonnes	Magne-site (tonnes)	Rock Salt	Silica Sand	Ochre (tonnes)	Sulphur (tonnes)	Soap Stone	Baryte	Bauxite/ Laterite (tonnes)	Iron Ore (tonnes)	Crude Oil (m. barrels)	Natural Gas (000 m.cu.mtr.)
Reserves Quantity		Over 100 million tonnes	Very large deposits	..	0.8 million tonnes	0.6 million tonnes	5 million tonnes	Over 74 million tonnes	Over 430 million tonnes	184 million US barrels	492 billion cu. metre
Years											
2000-01	4,645	1,394	155	4,691	17,428	47	28	35,114	24,765	21.08	24.78
2001-02	4,637	1,423	157	5,064	22,580	39	21	37,182	4,942	23.19	26.16
2002-03	2,645	1,426	185	6,733	19,402	66	41	67,536	11,483	23.46	28.11
2003-04	6,074	1,640	259	7,861	23,873	53	44	88,044	84,946	22.62	34.06
2004-05	3,029	1,648	309	18,686	24,158	21	42	78,288	104,278	24.12	38.08
2005-06	1,161	1,859	411	34,320	24,695	21	52	60,370	131,259	23.94	39.65
2006-07	3,445	1,873	402	61,665	27,710	45	47	150,842	150,695	24.62	40.03
2007-08	3,940	1,849	403	46,215	29,485	38	54	174,223	286,255	25.48	41.17
2008-09	2,639	1,917	370	56,617	25,784	14	63	137,485	320,214	24.03	41.37
2009-10	5,159	1,944	411	55,352	26,641	54	57	190,077	447,541	23.71	41.99
2010-11	4,908	1,954	301	36,078	27,645	48	31	308,027	329,100	24.04	41.68
2011-12	5,544	2,136	270	42,107	25,560	56	49	323,848	384,893	24.57	44.15
2012-13	6,705	2,160	356	37,769	20,610	93	118	353,355	412,108	27.84	42.65
2013-14	3,725	2,220	268	32,634	35,672	72	132	411,322	192,749	31.58	42.30
2014-15	4,431	2,136	269	33,909	19,730	101	119	417,036	328,702	34.49	41.51
Jul-Feb											
2014-15	3,439	1,441	170	20,513	14,757	65	105	267,595	243,476	23.22	27.63
2015-16 P	1,744	2,104	256	38,138	9,507	89	84	464,672	337,564	21.34	28.21

P : Provisional

Source : Pakistan Bureau of Statistics

TABLE 3.2

PRODUCTION INDEX OF MINING AND MANUFACTURING

Year	Mining	Manufacturing
	Base Year 1999-2000 = 100	
2000-01	105.6	111.2
2001-02	112.5	115.2
2002-03	119.6	123.6
2003-04	134.8	146.5
2004-05	148.7	173.0
		2005-06=100
2005-06	155.4	100.0
2006-07	158.2	109.5
2007-08	162.9	116.1
2008-09	160.4	109.1
2009-10	162.6	109.6
2010-11	160.7	111.1
2011-12	170.3	112.4
2012-13	171.5	117.4
2013-14	176.2	123.7
2014-15	178.1	127.9
2015-16 P	179.9	133.9

P : Provisional **Source: Pakistan Bureau of Statistics**

TABLE 3.3

COTTON TEXTILES STATISTICS

Year	No. of Mills	Installed Capacity		Working at the end of the period		Spindle Hours Worked (Million)	Loom Hours Worked (Million)	Consump-tion of Cotton (mln kg)	Total Yarn Pro-duced (mln.kg)	Surplus Yarn (mln. kg)	Total Pro-duction of Cloth (mln. sq mtr.)
		No. of Spindles (000)	No. of Looms (000)	No. of Spindles (000)	No. of Looms (000)						
2000-01	353	8,594	10	7,105	4	59,219	34.1	2,070.1	1,721.0	1,652.7	490.2
2001-02	354	8,967	10	7,078	5	61,267	36.3	2,155.2	1,808.6	1,731.2	568.4
2002-03	363	9,216	10	7,623	5	64,274	38.7	2,371.3	1,934.9	1,855.4	576.6
2003-04	357	9,499	10	7,934	4	69,652	32.7	2,397.8	1,929.1	1,835.9	683.4
2004-05	423	10,941	9	8,852	5	72,255	31.2	2,622.8	2,270.3	2,104.9	924.7
2005-06	437	11,168	9	9,631	4	74,884	24.8	2,932.6	2,556.3	2,457.6	915.3
2006-07	427	11,266	8	10,057	4	76,892	21.7	3,143.5	2,727.6	2,623.2	1,012.9
2007-08	427	11,834	8	9,960	4	76,400	21.5	3,153.2	2,809.4	2,700.3	1,016.4
2008-09	431	11,280	8	10,241	4	75,893	23.0	3,195.6	2,862.4	2,754.0	1,019.7
2009-10	439	11,392	7	10,632	4	74,654	22.4	3,372.4	2,881.0	2,776.6	1,009.6
2010-11	439	11,392	7	10,850	5	75,000	23.0	3,456.7	2,938.6	2,831.8	1,029.8
2011-12	433	11,762	7	10,660	5	76,932	22.6	3,427.1	2,964.6	2,857.5	1,024.3
2012-13	477	11,946	8	10,872	5	76,757	23.0	3,539.3	3,069.7	2,334.7	1,029.1
2013-14	442	12,310	8	11,000	5	76,950	23.0	3,675.5	3,333.4	2,558.7	1,036.1
2014-15	423	13,268	7	10,231	4	78,519	23.6	3,824.1	3,369.7	2,945.4	1,036.9
2015-16 P	423	13,268	7	10,500	4	79,002	23.8	2,955.9	2,542.0	2,029.4	780.2

P : Provisional **Source : Textile Commissioner Organization**

TABLE 3.4

PRODUCTION OF FERTILIZERS, VEGETABLE GHEE, SUGAR AND CEMENT

(000 tonnes)

Year	Fertilizers					Vegetable Ghee	Sugar	Cement
	Urea	Super Phos-phate	Ammo-nium Nitrate	Ammo-nium Sulphate	Nitro Phos-phate			
2000-01	4,005.1	159.6	374.4	-	282.5	835	2,956	9,672
2001-02	4,259.6	161.0	329.4	-	305.7	797	3,247	9,935
2002-03	4,401.9	147.2	335.3	-	304.9	772	3,686	10,845
2003-04	4,431.6	167.7	350.4	-	363.5	888	4,021	12,862
2004-05	4,606.4	163.1	329.9	-	338.9	1,048	3,116	16,353
2005-06	4,806.4	160.8	327.9	-	356.6	1,151	2,960	18,564
2006-07	4,732.5	148.9	330.8	-	325.8	1,180	3,527	22,739
2007-08	4,925.0	157.7	343.7	-	329.7	1,137	4,733	26,751
2008-09	4,918.4	187.4	344.3	-	305.7	1,060	3,190	28,380
2009-10	5,056.5	148.7	345.5	-	304.4	1,075	3,143	31,358
2010-11	4,552.1	173.3	275.1	-	252.3	1,091	4,169	28,716
2011-12	4,470.1	114.7	432.3	-	337.6	1,102	4,634	29,557
2012-13	4,215.1	79.3	401.3	-	291.9	1,138	5,073	31,055
2013-14	4,930.3	87.8	519.1	-	447.1	1,185	5,582	31,418
2014-15	5,073.1	63.6	569.1		501.9	1,182	5,149	32,185
July-March								
2014-15	3,805.9	47.3	361.9	-	317.8	877	4,812	23,459
2015-16 P	4,319.9	48.6	531.1	-	489.5	931	4,949	25,900

P : Provisional - : Nil Source: Pakistan Bureau of Statistics

TABLE 3.5

PRODUCTION OF SELECTED INDUSTRIAL ITEMS

Year	Food and Tobacco		Jute	Rubber			
	Beverages (000 litres)	Cigarettes (Million Nos)	Textiles (000 tonnes)	Motor Tyres (000 Nos)	Motor Tubes (000 Nos)	Cycle Tyres (000 Nos)	Cycle Tubes (000 Nos)
2000-01	2,542	58,259	89.4	2,439	3,387	4,056	5,892
2001-02	2,492	55,100	81.7	2,694	3,419	4,652	7,058
2002-03	2,289	49,365	95.5	3,360	4,091	5,330	8,942
2003-04	2,691	55,399	104.0	5,175	4,964	4,768	8,270
2004-05	3,424	61,097	104.8	5,336	6,279	4,900	9,612
2005-06	1,161	64,137	104.5	5,942	7,164	5,287	10,204
2006-07	1,550	65,980	118.0	7,027	10,277	5,182	10,420
2007-08	1,841	67,446	129.0	6,990	9,627	4,243	9,224
2008-09	1,894	75,609	137.4	7,089	14,515	3,213	6,876
2009-10	1,554	65,292	106.2	8,672	20,152	3,405	7,273
2010-11	1,490	65,403	93.2	9,222	19,108	2,879	6,534
2011-12	1,812	61,954	94.1	7,011	20,338	3,431	6,846
2012-13	2,077	67,377	102.8	7,864	20,269	3,429	7,746
2013-14	2,550	64,482	101.7	8,802	20,825	4,038	8,061
2014-15	2,954	62,667	94.3	9,058	22,001	4,633	8,391
July-March							
2014-15	2,042	46,790	71.7	6,662	15,985	3,586	6,636
2015-16 P	2,123	42,892	45.4	7,461	18,708	3,156	5,249

P : Provisional **(Contd.)**

TABLE 3.5

PRODUCTION OF SELECTED ITEMS

Year	Chemicals						Transport, Machinery & Electrical Appliances		
	Soda Ash (000 tonnes)	Sulphuric Acid (000 tonnes)	Caustic Soda (000 tonnes)	Chlorine Gas (000 tonnes)	Paints & Varnishes (tonnes)	Polishes & Creams for Footwear (mln. grams)	Bicycles (000 Nos.)	Sewing Machines (000 Nos.)	Total TV Sets (000 Nos.)
2000-01	217.9	57.1	145.5	14.5	10,922	906.7	569.6	26.9	97.4
2001-02	215.2	59.4	150.3	15.1	10,341	920.9	553.4	24.0	450.0
2002-03	280.3	56.0	164.4	15.9	3,899	935.3	629.7	30.6	764.6
2003-04	286.5	64.7	187.5	17.2	5,406	950.1	664.1	35.0	843.1
2004-05	297.3	91.3	206.7	19.1	15,023	959.6	587.9	36.1	908.8
2005-06	318.7	94.4	219.3	18.3	17,147	969.2	589.6	39.1	935.1
2006-07	330.6	96.3	242.2	17.2	23,936	978.8	486.3	52.2	608.6
2007-08	364.9	102.8	248.3	18.2	26,308	988.6	535.5	57.3	716.1
2008-09	365.3	97.1	245.3	16.5	29,831	998.5	419.9	50.8	402.3
2009-10	409.6	84.7	182.3	16.1	30,749	1008.5	447.2	48.6	342.9
2010-11	378.0	114.7	172.0	15.1	25,673	1018.6	345.2	47.0	425.5
2011-12	370.7	100.4	179.1	15.8	23,026	1028.8	262.1	39.6	268.8
2012-13	366.2	89.4	182.8	15.5	28,048	1039.0	232.9	32.8	462.9
2013-14	409.1	85.3	167.4	14.9	37,236	1049.4	203.7	19.8	426.6
2014-15	437.1	70.2	183.5	17.4	48,631	975.7	210.9	19.3	462.5
July-March									
2014-15	325.6	50.5	127.7	13.4	33,142	675.1	155.4	12.9	324.0
2015-16 P	345.6	63.5	161.9	12.2	40,162	681.9	141.9	11.0	332.3

P : Provisional **(Contd.)**

TABLE 3.5

PRODUCTION OF SELECTED INDUSTRIAL ITEMS

Year	Electrical Appliances		Paper & Board		Steel Products		
	Electric Bulbs (Mln.Nos)	Electric Tubes (000 metres)	Paper Board (000 tonnes)	Paper (All Types) (000 tonnes)	Coke (000 tonnes)	Pig Iron (000 tonnes)	Billets (000 tonnes)
2000-01	55.2	10,548	246.3	531.1	717.3	1,071.2	1,664.7
2001-02	52.8	10,441	165.1	137.9	694.6	1,042.9	1,874.2
2002-03	58.3	10,844	203.8	148.0	775.2	1,140.2	1,874.2
2003-04	139.4	14,630	225.7	156.8	785.5	1,179.9	2,118.9
2004-05	146.7	19,819	236.5	163.7	772.8	1,137.2	2,430.1
2005-06	143.6	19,992	286.1	167.7	182.3	768.0	3,380.6
2006-07	145.0	21,400	280.4	161.7	326.3	1,008.8	3,677.8
2007-08	129.8	19,524	227.6	192.0	290.9	993.4	2,873.8
2008-09	91.8	11,101	168.8	252.5	423.7	791.1	1,943.4
2009-10	75.5	2,914	178.1	248.7	342.8	483.3	1,663.8
2010-11	79.6	1,180	206.1	228.7	301.7	433.1	1,628.9
2011-12	79.0	1,266	283.0	246.3	192.9	249.1	1,616.4
2012-13	79.7	0	381.9	232.4	203.3	201.4	1,638.5
2013-14	75.1	0	465.8	218.7	31.9	89.4	2,128.3
2014-15	64.6	0	415.7	204.0	275.8	265.5	2,730.9
July-March							
2014-15	50.9	0	314.9	155.8	190.8	195.7	1,966.4
2015-16 P	44.3	0	283.8	173.3	57.4	1.5	2,416.3

P : Provisional

Source: Pakistan Bureau of Statistics
Ministry of Industries & Production

TABLE 3.6

PERCENT GROWTH OF SELECTED INDUSTRIAL ITEMS

(in %)

	Cotton Yarn	Cotton Cloth	Jute Goods	Veg.Ghee	Cigarettes	Fertilizers	Cement	Soda Ash	Caustic Soda	Sugar
2000-01	**3.10**	**12.10**	**4.60**	**19.60**	**24.02**	**11.10**	**3.80**	**(11.30)**	**3.00**	**21.70**
2001-02	**5.10**	**16.00**	**(8.70)**	**(4.50)**	**(5.40)**	**(1.80)**	**2.70**	**(1.20)**	**3.30**	**9.80**
2002-03	**5.90**	**2.40**	**16.90**	**(3.20)**	**(10.40)**	**2.50**	**9.20**	**30.30**	**9.30**	**13.50**
2003-04	**0.70**	**17.40**	**8.90**	**15.10**	**12.20**	**9.00**	**18.60**	**2.20**	**14.10**	**9.10**
2004-05	**18.20**	**35.30**	**0.80**	**18.00**	**10.30**	**7.50**	**27.10**	**3.80**	**10.20**	**(22.50)**
2005-06	**11.73**	**(2.30)**	**(0.30)**	**9.90**	**5.00**	**4.30**	**13.50**	**7.20**	**6.10**	**(5.00)**
2006-07	**11.73**	**8.18**	**12.97**	**2.45**	**2.87**	**(2.76)**	**22.49**	**3.74**	**10.45**	**19.16**
2007-08	**2.44**	**3.95**	**9.29**	**(3.63)**	**2.22**	**3.27**	**17.64**	**10.37**	**2.50**	**34.20**
2008-09	**(0.04)**	**0.05**	**6.50**	**(6.75)**	**12.10**	**1.58**	**6.09**	**0.11**	**(1.18)**	**(32.61)**
2009-10	**(4.33)**	**(0.74)**	**(22.68)**	**1.38**	**(13.65)**	**3.58**	**10.49**	**12.12**	**(25.70)**	**(1.44)**
2010-11	**5.46**	**1.08**	**(12.30)**	**1.57**	**0.17**	**(8.88)**	**(8.43)**	**(7.70)**	**(5.62)**	**32.62**
2011-12	**0.52**	**0.30**	**0.98**	**1.01**	**(5.27)**	**0.08**	**2.93**	**(1.93)**	**4.11**	**11.16**
2012-13	**3.57**	**0.56**	**9.28**	**3.25**	**8.75**	**(4.02)**	**5.07**	**(1.22)**	**2.11**	**9.48**
2013-14	**8.62**	**0.68**	**(1.07)**	**4.08**	**(4.30)**	**16.50**	**1.17**	**11.72**	**(8.42)**	**10.03**
2014-15	**1.09**	**0.08**	**(7.21)**	**(0.23)**	**(2.81)**	**4.56**	**2.44**	**6.83**	**9.85**	**(7.75)**
July-March										
2014-15	**1.16**	**0.05**	**(8.91)**	**(1.33)**	**(0.69)**	**0.95**	**2.87**	**9.64**	**1.52**	**(6.09)**
2015-16	**1.54**	**0.43**	**(36.65)**	**6.12**	**(8.33)**	**15.92**	**10.41**	**6.14**	**26.85**	**2.85**

Note : Figures in parenthesis represent negative growth **Source: Pakistan Bureau of Statistics**