Manufacturing and Mining

3.1 Introduction

The manufacturing sector is one of the key sectors of economy with multidimensional activities of various sub sectors. It has multiplier impact on growth through value additions. A stimulating growth in this sector means creation of more jobs and increased exports. This sector is most vulnerable to factors like government policies, trade agreements, infrastructure, Foreign Direct Investment (FDI), workforce and R&D activities, access to energy supply and innovations. Manufacturing sector accounts 13.3 percent of Gross Domestic Product (GDP) and 14.2 percent of total employed labor force. Large Scale Manufacturing (LSM) at 10.6 percent of GDP dominates the overall sector, accounting 80 percent of the sectoral share followed by Small Scale Manufacturing, which accounts for 1.7 percent of total GDP. The third component of the sector is Slaughtering and account 0.9 percent of overall GDP.

Large Scale Manufacturing (LSM) during July-March 2014-15 registered a growth of 2.5 percent as compared to 4.6 percent in the same period last year. 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 as 0.15 percent, 1.02 percent and 1.31 percent, respectively. The industry specific data shows that sub sectors recorded negative growth during the period July-March FY 2014-15 over corresponding period of last year i.e. Wood Product declined by 78.46 percent (as compared to -8.91 percent last year), Engineering Products 10.68 percent (as compared to -20.15 percent last year), Paper and Board 7.26 percent (as compared to 9.30 last year), Food Beverage and Tobacco 1.03 percent (as compared to 8.24 percent last year) and Rubber products 0.56 percent (as compared to 9.41 percent last year).The sector showing growth during July-March 2014-15 such as Iron and Steel Products 35.63 percent (as compared to 3.38 percent last year), Automobiles 17.02 percent (as compared to 0.35 percent last year), Leather Products 9.62 percent (as compared to 12.70 percent last year), Electronics 8.21 percent (as compared to 7.02 percent last year), Pharmaceuticals 6.38 percent (as compared to -0.37 percent last year), Chemicals 5.94 percent (as compared to 6.74 percent last year), Non Metallic mineral products 2.56 percent (as compared to 0.19 percent last year), Coke & Petroleum Products 4.73 percent (as compared to 7.49 percent last year), Fertilizers 0.95 percent (as compared to 21.64 percent last year) and Textile 0.50 percent (as compared to 1.45 percent last year).

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

Fig-1: 2013-14 (LSM Year on Year Growth Rate)

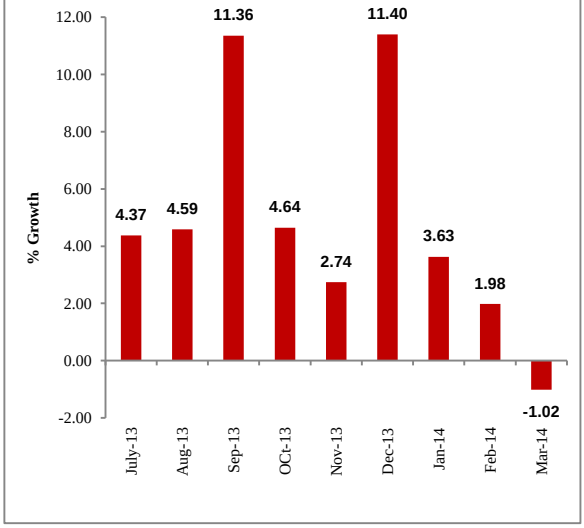
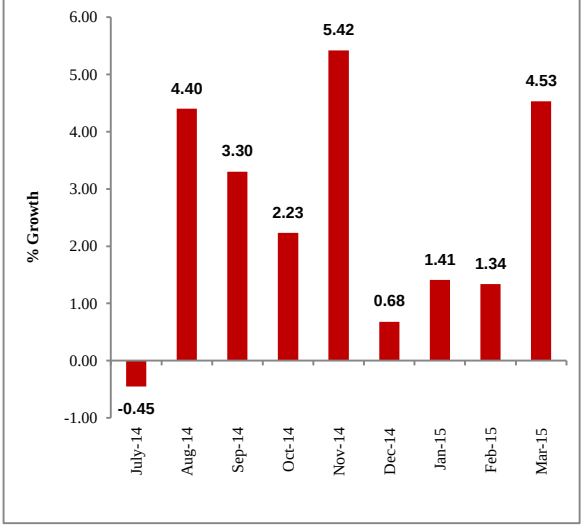


Fig-2: 2014-15 (LSM Year on Year Growth Rate)



LSM growth was hampered by a broad range of issues that include weak export of cotton yarn, gas shortages in number of industries and sector specific factors like closure of large chip board plant and substitution of domestic production of edible oil with imports. Cotton yarn production witnessed both demand and supply issues. On demand side, export demand for cotton yarn has remained low since last year especially after the reversal of cotton policy by China. China has been building cotton stocks since 2011 by offering higher than competitive prices to local farmers. The consequent widening of the gap between international and local cotton prices encouraged Chinese manufacturers to increase their imports of cotton yarn and its bi products. In March 2014, the Chinese Government introduced a major shift and would pay the price differential to farmers if market price falls from a target level, which was significantly smaller than the price at which the government was earlier buying from the market. On supply side, gas shortage was another drag of yarn manufacturing.

The Food Beverages and Tobacco performance can be well gauged that it has a share of 12.37 percent in LSM has shrunk by 1.0 percent in contrast to a growth of 8.2 percent last year as the performance of Sugar recorded a negative growth of 6.1 percent as compared to positive growth of 10.9 percent corresponding period July-March 2013-14. Sugar production fell on account of late commencement of the sugarcane crushing following the stand-off between cane growers and sugar mills over support prices. The ghee manufacturing declined by 1.4 percent primarily in response to large inventories from last year's production recorded growth at 5.1 percent. The fertilizer sector could not performed due to shortage of gas supply during last couple of months. The period average growth remained negative from September 2014 to January 2015 and posted a nominal growth of 0.9 percent during July-March 2014-15 as against robust growth of 21.6 percent on account of smooth gas supply during same period last year. It is expected that the sector will revive its performance in coming months due to smooth supply of gas in summer season. Textile having higher weight in Quantum Index of Manufacturing (QIM) remained subdued which further impacted the growth of LSM sector.

Group wise growth and points contribution rate of LSM for the period of July-March 2013-14 versus July-March 2014-15 are given in the following Table-3.1.

Table 3.1: Group wise growth and Point Contribution rate of LSM for the Period of July-Mar 2014-15 Vs July-Mar 2013-14

S.No.	Groups	Weights	% Change		% Point Contribution	
			July-Mar		July-Mar	
			2013-14	2014-15	2013-14	2014-15
1	Textile	20.915	1.45	0.50	0.30	0.11
2	Food, Beverages & Tobacco	12.370	8.24	-1.03	1.02	-0.13
3	Coke & Petroleum Products	5.514	7.49	4.73	0.41	0.26
4	Pharmaceuticals	3.620	-0.37	6.38	-0.01	0.23
5	Chemicals	1.717	6.74	5.94	0.12	0.10
6	Automobiles	4.613	0.35	17.02	0.02	0.79
7	Iron & Steel Products	5.392	3.38	35.63	0.18	1.92
8	Fertilizers	4.441	21.64	0.95	0.96	0.04
9	Electronics	1.963	7.02	8.21	0.14	0.16
10	Leather Products	0.859	12.70	9.62	0.11	0.08
11	Paper & Board	2.314	9.30	-7.26	0.22	-0.17
12	Engineering Products	0.400	-20.15	-10.68	-0.08	-0.04
13	Rubber Products	0.262	9.41	-0.56	0.02	0.00
14	Non-Metallic Mineral Products	5.364	0.19	2.56	0.01	0.14
15	Wood Products	0.588	-8.91	-78.46	-0.05	-0.46

Source: Pakistan Bureau of Statistics (PBS)

However, during current fiscal year 2014-15 the stability has been seen in LSM growth as number of groups performed remarkably well as compared to last year. Iron and steel product has shown improved performance on account of government bailout package likewise automobile flourished due to reduction in sales tax on tractors as well introduction of new models by automobile manufacturers.

The growth in iron & steel products was on account of growth recorded in pig iron 187.2 percent and Billets/Ingots 28.5 percent. The overall growth in steel production remained strong on account of expanding their existing capacities such as Mughal steel and International steel expanded their existing capacities.

In Automobile sector such as trucks, tractors, cars & jeeps and LCVs registered growth of 53.9 percent, 44.6 percent, 23.1 percent and 31.2 percent, respectively. Production of trucks has increased substantially compared to the same period last year mainly on account of leading manufacturers GHNL has established its assembling plant in Pakistan. Tractors production witnessed increased significantly after cut in general sales tax (GST) from 16 percent to 10 percent in the Federal Budget 2014-15. The demand for commercial vehicles increased on account of initiative started by the Punjab government namely Apna Rozgar Scheme under which process of distribution of 50 thousand vehicles among jobless youth.

In Leather Product, the growth mainly derived from footwear product recorded at 14.8 percent. In Electronics Products the growth of 8.2 percent arrived from the items like electric transformer 149.1 percent, electric meters 70.5 percent, storage batteries 17.6 percent and refrigerators 13.3 percent.

In Pharmaceuticals group, injections, capsules and tablets were the main contributors which managed to grew by 16.0 percent, 14.9 percent and 4.3 percent, respectively. The growth in Pharmaceuticals industry is heavily dependent on import of raw materials due to non availability of domestic inputs as well as no pharmaceuticals company has an Federal Drug Authority (FDA) approved manufacturing plant which is pre requisite for pharmaceutical exports to most of the countries.

In Non metallic mineral product, cement managed to grew by 2.7 percent as against 0.2 percent during July-March 2013-14 on account of impetus in the construction activities. Coke and Petroleum products growth mainly arrived from the production of coke 497.6 percent, kerosene oil 17.6 percent and solvant naptha 36.1 percent during the period under review.

The Food, Beverages & Tobacco in the Large Scale Manufacturing (LSM) remained negative during the period under review, however, some items showed positive growth in food, beverages & tobacco includes soft drinks 14.5 percent, juices, syrups & squashes 24.9 percent and tea blended 17.0 percent.

Item wise review of production of selected items of Large Scale Manufacturing during July-March 2014-15 is given in Table-3.2.

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

S.No.	Items	Unit	Weight	July-Mar		% Change (Jul-Mar) 2014-15	% Point Contribution (Jul-Mar) 2014-15
				2013-14	2014-15		
1	Deep Freezers	(Nos.)	0.162	60,034	54,089	-9.90	-0.016
2	Jeep & Cars	(Nos.)	2.818	86,187	106,135	23.15	0.652
3	Refrigerators	(Nos.)	0.239	874,534	991,254	13.35	0.032
4	Upper Leather	(000 sq.m.)	0.392	18,496	18,352	-0.78	-0.003
5	Cement	(000 tonnes)	5.299	22,804	23,428	2.74	0.145
6	Liquids/Syrups	(000 Liters)	1.136	69,197	72,743	5.12	0.058
7	Phosphatic Fertilizer	(N tonnes)	0.400	416,272	442,164	6.22	0.025
8	Tablets	(000 Nos)	1.914	18,865,495	19,684,768	4.34	0.083
9	Cooking Oil	(Tonnes)	2.227	268,536	267,837	-0.26	-0.006
10	Nitrogenous Fertilizer	(N tonnes)	4.041	1,934,304	1,940,098	0.30	0.012
11	Cotton Cloth	(000 sq.m.)	7.186	776,500	776,900	0.05	0.004
12	Vegetable Ghee	(000 tonnes)	1.144	885,759	873,171	-1.42	-0.016
13	Cotton Yarn	(Tonnes)	12.965	2,293,260	2,304,460	0.49	0.063
14	Sugar	(Tonnes)	3.545	5,124,540	4,812,408	-6.09	-0.216
15	Tea Blended	(Tonnes)	0.382	78,572	91,950	17.03	0.065
16	Petroleum products	(000 Liters)	5.410	9,996,469	10,244,097	2.48	0.134
17	Cigarettes	(Million Nos.)	2.125	47,114	46,789	-0.69	-0.015
18	Coke	(Tonnes)	0.104	31,924	190,794	497.65	0.520
19	Pig iron	(Tonnes)	1.584	68,161	195,741	187.17	2.965

Source: Pakistan Bureau of Statistics (PBS)

The Year on Year performance of LSM sector for March 2015 recorded a growth of 4.5 percent as compared to negative growth of 1.0 percent in March 2014. This can be well gauged from Food Beverages and Tobacco recorded a growth of 8.1 percent on account of better performance of sugar as it witnessed a growth of 18.7 percent over March 2014. Similarly in case of sugar if to compared with July-February 2014-15 recorded a negative growth 11.4 percent has to some extent improved by -6.1 percent during July-March 2014-15.

The other sectors performed well in March 2015 over March 2014 are Iron & Steel product 44.9 percent, Automobiles 30.2 percent, Coke & Petroleum product 13.6 percent, Pharmaceuticals 9.8 percent, Leather products 6.8 percent and Fertilizers 6.0 percent. The graphical representation of monthly production trends of major Large Scale Manufacturing (LSM) sector items during the July to March 2014-15 compared to corresponding period July to March 2013-14 is given below.

Fig-3: Monthly Production trends of major Large Scale Manufacturing (LSM) sector items during the July-March 2014-15 compared to corresponding period July-March 2013-14

Pak-China Economic Corridor will lead to greater investment and rapid industrialization in Pakistan. Successful implementation of this tie will be a game-changer for the people of Pakistan in terms of new economic opportunities leading to higher incomes and significant improvements in the living standards of a ordinary Pakistanis. Moreover, government has commenced renewable energy projects and some 10400 MW would be added to the national grid by 2018. It will drive the sector expansion by supporting the growth of economic clusters; facilitating access to technology; expanding the capital market and improving its efficiency; disseminating knowledge of markets; upgrading labour's technical skills; ensuring adequate incentives for research and development and encouraging movement of the value chain. A Corporate Synergy Development Centre comprising of industrial experts and professionals in the government will implement the manufacturing/ industry component of Vision 2025. Development of industrial parks for small, medium and large enterprises has been initiated, and will be expanded particularly in less developed/under-served areas.

3.2 Textile Industry

Pakistan has inherent advantage of being 4th largest producer of cotton in the world with a huge potential to further increase crop yield. For success of any export led industry, local availability of basic raw material is considered to be an added advantage as being a key factor in reducing cost of doing business. It is encouraging that Pakistan rank 3rd in the world in the field of yarn production. The textile value chain consists of ten industrial sub-sectors. The

value chain is quite long starting from cotton picking to a finished garment of the latest fashion. The end product of one sub-sector is the basic raw material for the other. Each sub-sector in the value change contributes to value addition and employment generation. As the change moves downstream, each link creates larger number of jobs with relatively lower investments.

Global Overview

Global textiles and clothing trade has increased substantially since the post quota regime. However, Pakistan share in the global textiles and clothing trade has remained stagnant due to changes in the distribution chain as well as the creation of an uneven playing field by the importing countries through preferential trade agreements and special access given to different competitor countries.

According to international statistics report the export of textile and clothing trade has increased from US $ 709 billion in 2012 to US $ 766 billion in 2013 showing an increase of 8.03 percent. The exports of Pakistani textile and clothing trade has also increased from US$ 12.9 billion in 2012 to US$ 13.8 billion in 2013 with the increase of about 6.97 percent. The top ten exporters witnessed positive growth. The highest growth was seen by India, with 23 percent and the lowest was recorded by the Republic of Korea, with 2 percent. The top exporters remain in the same positions, with the exception of Vietnam which overtook the United States in 2013 as the sixth-largest exporter of textiles and clothing world exports. The European Union is the largest importer of clothing account for 38 percent of world imports in 2013 followed by the United States with 19 percent of world imports.

Table 3.3: Export of Textile and Clothing (US $ Billions)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
World Textile	202.4	220.4	240.4	250.2	209.9	250.7	294.0	286.0	306.0
World Clothing	276.8	309.1	345.8	361.9	315.1	351.5	412.0	423.0	460.0
Total:-	479.5	529.5	586.2	612.0	524.0	602.2	706.0	709.0	766.0
Pakistan Textile	7.0	7.5	7.4	7.2	6.5	7.8	9.1	8.7	9.3
Pakistan Clothing	3.6	3.9	3.9	3.9	3.4	3.9	4.6	4.2	4.5
Total	10.6	11.4	11.2	11.0	9.9	11.8	13.7	12.9	13.8
Percentage of World Trade	2.23	2.15	1.91	1.81	1.88	2.00	1.94	1.81	1.8

Source: World Trade Organization (WTO)

Domestic Overview

The textiles sector in Pakistan has remained stagnant over the last decade due to a number of exogenous and indigenous factors such as subsidies given to cotton farmers and other textiles products by several countries which distorted prices, marketing constraints, global recession, and increasingly stringent buyers conditionality. On the domestic side, cotton production has remained stagnant at about 13 million bales per annum and the resistance to grading and standardization of cotton bales by ginners and spinners alike has consistently lowered the value of Pakistani cotton by around 10 cents per pound in the international market. On the other hand, the value-added garments sector has grown marginally due to its limited product range, low usage of manmade fibers and inability of manufacturing units to restructure in order to meet changing international requirements.

Federal government has announced textile policy 2014-19. The package carries special duty-drawback rates, duty exemption on plants and machinery, subsidy on long-term loans and development subsidies. The Policy offered about Rs. 64.15 billion cash subsidy to the textile and clothing sector to boost exports to $26 billion by 2019 from $13 billion. The Finance Division will provide Rs. 40.6 billion over the five years for duty drawback, technology up-gradation and brand development etc., while another Rs. 23.5 billion will be provided for skill development, dedicated textile exhibitions, establishment of world textile centre, weaving city, incubators, apparel house, and mega textile awards. Around 120,000 peoples will be trained through skill development program and 50 small companies from the sector will be picked each year for the next three years for government support and the proposed measures will promote value-addition

and generate employment for more than 5 million people.

Performance of Textile Industry

Textiles 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 of industrial value-added, provides employment to about 40 percent of industrial labor force, and consumes about 40 percent of banking credit to manufacturing sector. Barring seasonal and cyclical fluctuations, textiles products have maintained an average share of about 54 percent in national exports. The export performance during the period under review is given in the Table 3.4.

Table 3.4: Export of Pakistan Textiles (US$ Millions)

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15 (Jul-Mar)
Cotton & Cotton textiles	10,071	9,308	9,754	13,147	11,778	12,652	13,143	9,785
Synthetic textiles	490	319	446	608	546	406	383	274.292
Wool & woolen textiles	216	145	137	132	121	122	125	92.902
Total textiles	10,777	9,772	10,337	13,887	12,445	13,180	13,857	10,294.193
Total exports	19,224	17,782	19,290	24,810	23,624	24,515	25,131	17,930.897
Textile as % of Exports	56	55	54	56	53	54	55	57

Source: Ministry of Textile

3.2.1Ancillary 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 (92 percent corresponding period last year) and 76 percent (82 percent corresponding period last year) respectively, during July –March, 2014-15.

ii. Cloth Sector

There are three different sub-sectors in weaving viz, Integrated, Independent Weaving Units, and Power loom units. 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. Production of cloth in mill sector is reported. The production in non-mills sector is not reported and therefore is estimated. The Table 3.5 showed production and export of clothing during the period under review.

Table 3.5 Production and export of Clothing Sector

Production	July-March 2014-15	July-March 2013-14	% Change
Mill Sector (M. Sq. Mtrs.)	776.900	776.500	0.052
Non Mill Sector (M. Sq. Mtrs.)	6063.949	6064.100	-0.003
Total	6840.849	6840.600	0.005
Cloth Exports			
Quantity (M.SqMtr.)	1450.945	1973.821	-26.49
Value (M.US$)	1859.722	2128.216	-12.62

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 2014-15 is presented in Table 3.6.

Table 3.6: Export of Textile Made-Ups

	July-March 2014-15	July-March 2013-14	% Change
Hosiery Knitwear			
Quantity (M.Doz)	81.650	80.310	1.67
Value (M.US$)	1,791.789	1,666.143	7.54
Readymade Garments			
Quantity (M.Doz)	22.843	21.434	6.57
Value (M.US$)	1,548.282	1,426.826	8.51
Towels			
Quantity (M.Doz)	120.862	123.394	-2.05
Value (M.US$)	579.588	569.614	1.75
Tents/Canvas			
Quantity (M.Doz)	36.466	21.691	68.12
Value (M.US$)	105.614	58.028	82.01
Bed Wears			
Quantity (M.Doz)	238.277	240.251	-0.82
Value (M.US$)	1,569.602	1,608.247	-2.40
Other Made up			
Value (M.US$)	485.761	488.021	-0.46

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 approximate 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 2014-15 worth $ 1791.789 million was exported as compared to $ 1666.143 million which shows an increase of 7.54 percent in comparable period of last year. Even in quantity terms the export of knitwear industry has increased by 1.67 percent. The export performance of knitwear during the period under review is given below in Table.3.7.

Table 3.7: Export of Knitwear

	July-March 2014-15	July-March 2013-14	% Change
Quantity (000.Doz)	81.650	80.310	1.67
Value (M.US$)	1791.789	1666.143	7.54

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 large demand both at home and abroad. 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. It mainly uses locally produced raw materials. Most of the machines used by this industry are imported or locally made and assembled.

Production of garments by units depends on export orders directly or indirectly. These orders have somewhat risen in terms of value, but they

have fluctuated widely in terms of quantity. Generally export earnings from garments have increased significantly. Exports increased from 21.434 million dozens in various types of readymade garments worth US$ 1426.826 million in July-March 2013-14 as compared to 22.843 million dozens worth $1548.282 million in July -March 2014-15, thus showing an increase of 8.51 percent in terms of value.

Table 3.8: Export of Readymade Garments

	July-March 2014-15	July-March 2013-14	% Change
Quantity (M.Doz)	22.843	21.434	6.57
Value (M.US$)	1548.282	1426.826	8.51

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 are upgraded to produce higher value towels. Export performance of towel sector during the period is given below in Table 3.9.

Table 3.9: Export performance of Towel sector

	July-March 2014-15	July-March 2013-14	% Change
Quantity (M.Kgs)	120.862	123.394	-2.05
Value (M.US$)	579.588	569.614	1.75

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. This value-added sector has also great potential for export. The 60 percent of its production is exported while 40 percent is consumed locally by Armed Forces Food Department. Pakistan is the cheapest source of supply of Tents and Canvas. The export performance of this sector during July-March 2014-15 recorded at $ 105.614 million as compared to the $ 58.028 million in comparable period last year, thus showing as increase of 82.01 percent.

Table 3.10: Export performance of Tent and Canvas Sector

	July-March 2014-15	July-March 2013-14	% Age Change over
Quantity (000.Doz)	36.466	21.691	68.12
Value (M.US$)	105.614	58.028	82.01

Source: Ministry of Textile

iv) Synthetic textile fabrics

During July-March 2014-15, synthetic textile fabrics worth $ 274.29 million were exported as compared to $ 284.19 million showing a decrease of 3.48 percent in comparable period of last year. Even in Quantity term the export of synthetic decreased by 17.15 percent.

v) Woolen Industry

The main products manufactured by the woolen industry are carpets and rugs. The exports of carpet during the period July-March 2014-15 is given in the Table 3.11.

Table 3.11: Exports of Carpets and Rugs (Woollen)

	July-March 2014-15	July-March 2013-14	% Change
Quantity (M.Sq.Mtr)	2.002	2.591	-22.73
Value (M.US$)	92.902	97.280	-4.50

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 3.12: Installed and working capacity of Jute

	July-March 2014-15	July-March 2013-14	% Change
Total No. of Units	10	10	0%
Spindles Installed	24,544	25,715	-5%
Spindles Worked	22,305	23,443	-5%
Looms Installed	1,092	1,175	-7%
Looms Worked	871	1,016	-14%

Source: Ministry of Textile

The production of the Jute goods for the period of July – March 2014-15 and 2013-14 is 71,670 and 78,683 metric tons, respectively showing a decrease of 9 percent.

Box-I: Textiles Policy 2014-19

The Textiles Policy 2014-19 is based on actionable plans to make the textiles sector competitive and sustainable. The government will make sure that the benefits of Textiles Policy 2014-19 are spread at the national level and have a positive impact on small and medium enterprises through various measures including development of clusters. The main theme of the current Policy is to increase dependence on special factors which give comparative advantage and to increase the use of new technologies especially ICT options, for improving competitiveness of the entire textiles value chain.

Vision

To become a leading country in the field of export of value-added textile products

Mission

To develop and implement a textiles policy which ensures consistency, predictability and transparency in government actions and programmes, while building the reputation of the country as a reliable source of high quality textile goods

Goals

- To double value-addition from $1billion per million bales to $2 billion per million bales in five years
- To double textiles exports from $13 billion per annum to $26 billion per annum in next five years
- To facilitate additional investment of $5 billion in machinery and technology
- To improve fibres mix in favour of non-cotton i.e. 14 percent to 30 percent
- To improve product mix especially in the garment sector from 28 percent to 45 percent
- To strengthen existing textile firms and establish new ones
- SME sector will be main focus of attention to enhance growth in value-added products through support and incentives schemes
- Schemes and initiatives will be launched for increasing usage of ICT
- The textiles sector will be made domestically and internationally compliant especially with respect to labour and environment rules and conventions
- Textiles units will be encouraged to use modern management practices for improving efficiency and reducing wastages
- Clusters would be systematically developed and existing clusters will be strengthened
- Vocational training of workers for capacity building, internships and different programmes for enhancement of skills and higher per capita productivity would be introduced
- Facilitate the creation of three million new jobs
- Promotion of specialty skills training for professionals and supervisory levels.
- Adopt measures to increase ease of doing business and reducing cost of doing business

Source: Ministry of Textile

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. Engineering Development Board has so far taken the following initiatives.

i. Capacity Building and International Linkages

EDB has developed linkages with various international organizations to provide short term expert services to local industry with the objective to improve production process, quality of product, managerial capabilities, accounting system improvement etc. EDB has so far arranged Dutch and German experts for 38 companies while cases of 5 companies are in pipeline. These experts are providing professional and technical services in the areas of energy efficiency, product and product quality improvement, productivity & process improvement, international certification, international marketing, improvement in accounting system and improving product design. For upgrading the technical & vocational institutes, following four institutes of TEVTA have been enrolled under PUM's Vocational Education for Higher Categories and Levels (VEHICLE) Programme.

- Woodworking service Centre-Rawalpindi
- Wood Working Service Centre-Gujrat
- Cutlery and small tools Centre-Wazirabad
- Light engineering Service Centre-Gujranwala

ii. Organizing Engineering Pavilion at 9th Edition of Expo Pakistan February 26th to March 1st 2015

Based on the successful experience and excellent response of all the stakeholders on organizing 8th Edition of Expo Pakistan 2013, EDB was again invited by TDAP to organize engineering pavilion for the 9th edition of expo Pakistan which was scheduled in October, 2014. Preparatory work was initiated but due to security concerns, the expo being held from February 26th 2015 to March 1st, 2015. An overwhelming response received from the local business communities, investors, importers and traders who witnessed a wide range of modern, high quality products and machines on show.

iii. Coordination with Ministry of Commerce for Development of National Export Growth Strategy

In order to realize the vision of the Prime Minister of Pakistan to double the exports level, MOC has initiated an exercise to develop National Export Growth Strategy with active involvement of all the related organizations. EDB pursuance of its mission to promote engineering sector of Pakistan for its global integration resubmitted the relevant proposals from National Engineering Export Development Strategy (NEEDS) which is a comprehensive study carried out by EDB with involvement of all stakeholders.

iv. Engineering Goods and Services Exporters Directory 2014-2015

In order to project Engineering Image of Pakistan, EDB is in the process of updating the Engineering Goods Exporter Directory of Pakistan. The Directory would be having complete profiles of more than 150 leading Exporters of Pakistan in various engineering sub sectors and is being circulated to Pakistan's Foreign Missions, Foreign and local Chambers of Commerce, Associations and EDB's international support partners in the potential markets.

3.3-2 Automobile Industry

In Automobile sector, there has been surge in productions of all its sub sectors except buses and two/three wheelers during the period July-March 2014-15.The passenger cars and jeeps have registered a growth of 23 percent and 4.5 percent, respectively. Although there has been negative growth in most of the existing models of passenger cars and jeeps but it was offset by recently introduced models in this category. Similarly in case of Light Commercial Vehicles (LCVs) there is recovery with sizeable growth of 31 percent. In addition, local production of trucks gone up by 54 percent which the industry owes to certain praiseworthy measures taken by the government such as combination of stringent enforcement actions and policy interventions whereby disguised imports of trucks could be curbed. In case of tractors, its production

suffered a lot after imposed heavy tax (16 percent) in 2012. The present government levy finally settled at 10 percent in the second half of 2014, hence the revival is the evidence with 44.6 percent growth during July-March 2014-15. The overall performance of the automobile industry during the year July-March 2014-15 and 2013-14 has been given in Table 3.13.

Table 3.13. Production of Automotive Industry (No of units produced)

Category	Installed Capacity	2013-14 (July-Mar)	2014-15 (July-Mar)	% Change
Cars	240,000	85,681	105,267	23
LCVs	43,900	13,355	17,521	31
Jeeps	5,000	830	868	4.5
Buses	5,000	445	410	-8.0
Trucks	28,500	1,807	2,781	54
Tractors	65,000	24,714	35,753	44.6
Two/Three Wheelers	2,500,000	586,580	544,864	-7.0

Source: Pakistan Automotive Manufacturer Association

During July-March 2014-15, there is downturn in local production of buses on account of preferring import of CBU buses in the provinces and local bus industry kept out of that growing demand in favour of imports without regard to massive idle capacity in local commercial vehicle (HCV). The local produced buses are being offered at far cheaper price of Rs. 11 to 13 million compared to the price of Rs. 28 million at which purchased from China.

Pakistan one of the tenths largest bikes market in the world. The two/three wheelers sector offers most preferred and economical means of transport and best alternate in the absence of public transport and thus holds out considerable opportunities of growth. The reason for the fall in overall growth essentially rests with the two wheelers who remained negative 8.4 percent during 2014-15 however, significant growth of 14.2 percent in three wheelers mitigates the impact. Yamaha Motor Pakistan (YMPK) has recently established the Pakistan Motorcycle Manufacturing Base (PMMB) at Bin Qasim Industrial Park (BQIP), Karachi and it would expect to enhance the production as well as manpower skills through technology transfer (Box-II).

The Auto Industry Development Programme (AIDP) expired on 30th June 2012. Currently, new Automotive Development Policy (ADP) is under preparation/approval of the concerned authorities. ADP has following policy objectives and strategic interventions to promote automotive sector in Pakistan.

Policy Objectives

1. Facilitate higher volumes, more investment, better quality and latest technology
2. Creating a balance between industrial growth and tariffs
3. Stimulating growth and streamlining trading activities
4. Ensuring consumer welfare; quality, safety, choice and value for money
5. Policy developments consistency, predictability and review mechanism to cater for merging

Strategic Interventions

1. Lower entry threshold for New Investment
2. Create enabling Tariff structure for development
3. Rationalize automobiles import policy
4. Provide regulatory and enforcement mechanisms for Quality, Safety and Environmental standards
5. Create R&D, design and testing infrastructure
6. Develop human resource and training infrastructure
7. Introduce technology acquisition support scheme
8. Ensure consumer welfare

Box-II: Yamaha Motor's Pakistan Motorcycle Manufacturing Base(PMMB) at Bin Qasim Industrial Park (BQIP), Karachi

Yamaha Motor Pakistan (YMPK) has established the Pakistan Motorcycle Manufacturing Base (PMMB) at Bin Qasim Industrial Park (BQIP), Karachi and was inaugurated by Finance Minister along with Japanese Ambassador Hiroshi Inomata, Minister of State and Chairman Board of Investment, Minster of State for Privatization, President Yamaha and Managing Director Yamaha Pakistan. BQIP had already been approved and Yamaha was the first enterprise, which had 100 percent ownership in BQIP and PMMB was based on new technology and it would produce bikes having capacity of 125CC and above. Yamaha was importing 75 percent parts from Japan while rest of the 25 percent parts were being manufactured locally so Yamaha has bright prospects in Pakistan as bikes demand in the country stood around two million. YMPK has big market in Pakistan as country's middle class would increase to 100 million from 70 million by 2025. The new factory with a total floor area of 17000 square meter, was built on a 203,456 Square meter piece of land in the BQIP with 200 employees. In 2015, the first year of production, the new factory is expected to produce 30,000 units and will target the production between 300,000 to 4000,000 units by 2020.

The policy of incumbent government is more liberal and friendly compared to past tenures which compelling many countries and several Japanese firms to reconsider Pakistan for investment.

3.3-3 Fertilizer Industry

The fertilizer industry is provider of one of the key inputs for crop production contributing from 30 to 50 percent in crop production. In Pakistan, there are nine urea manufacturing plants, one DAP, three NP, three SSP, 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 is around 8,983 thousand tonnes per annum, the actual production for all products remained 6,765 thousand product tonnes during 2013-14 which is less by 25 percent of the installed production capacity. Fertilizer production is estimated to increase slightly during 2014-15 and will reach to level of 6,900 thousand tonnes. The main reason for this low fertilizer production in country is the gas curtailment to fertilizer industry which started since May 2010 and is still continuing.

Fertilizer sector is the second largest consumer of gas after the power sector, however, on account of the energy crisis in the country like others sectors, fertilizer sector has also affected badly. The decision of curtailment in the gas supply to the national fertilizer industry bore severe consequences like low production, undue price hike and increase in import and subsidy especially in case of urea. Smooth supplies of natural gas to urea plants are essential to run the plants at 100 percent of their installed capacity for making urea available (as per requirement) at stable/affordable price and avoiding its import. At least minimum required gas supply for feedstock purpose may be ensured to fertilizer manufacturing plants. It is estimated that for 2013-14, the implicit cross subsidy (un-budgeted) on natural gas being used as feedstock for urea manufacturing was as Rs. 41.30 billion.

At present, the installed production capacity (6323 thousand tonnes) of urea fertilizer is more than national demand of 6,200 thousand tonnes per annum but the actual production is much below than required level. The annual production of urea for 2014-15 is estimated at 5100 thousand tonnes, which is less by 19 percent of installed capacity of urea fertilizer. The situation will improve in coming months due to smooth supply of gas to fertilizer industry.

3.3-4 Cement Industry

Pakistan stands among the top 20 cement producers in the world and among the top 5 exporters of cement. Strong public sector development funding and growing private sector construction present solid growth opportunities in the sector. During July-April 2014-15, cement industry dispatched 22.99 million tons in the local market, posting a growth of 7.97 percent as compared to the local dispatches during the same period last year. During July-April 2014-15 total dispatched was 29 million tonnes as against 28 million tonnes during the same period last year owing to rising domestic demand. Cement dispatches to domestic markets during April 2015 increased by 4.57 percent to 2.65 million tonnes compared with 2.54 million tonnes during same month last year. Exports during April were 640,000 tonnes against 672,000 tonnes during April 2014, down by 4.72 percent. Total dispatches in April 2015

were 3.29 million tonnes compared to 3.21 million tonnes during the same month last year, up by 2.62 percent. The cement industry is still operating at a little over 76 percent capacity which translates into idle capacity of 8.94 million tones.

Table 3.14: Cement Production Capacity & Dispatches (Million Tonnes)

Years	Production Capacity	Capacity Utilization (%)	Local Dispatches	Exports	Total Dispatches
2006-07	30.50	79.56	21.03	3.23	24.26
2007-08	37.68	80.40	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
July-April					
2013-14	44.64	75.23	21.30	6.69	27.99
2014-15	45.62	76.49	22.99	6.08	29.08

Source: All Pakistan Cement Manufacturers Association (APCMA)

Demand of cement in Afghanistan has been declining and hampering exports by northern manufacturers on account of withdrawal of NATO forces and increased supply from the Iranian side. On the other hand Southern exports are improving with greater market reach through via sea route. An upside remains ample foreign assistance for development in Afghanistan; however, growth in this market rests on government commitment to development and magnitude of competition from Iran.

Reductions in input costs stand to improve gross margins and ultimately allow manufacturers to reduce prices, however, some stress of this aspect is seen in gas dependant manufacturers. In larger companies, LUCKY, DG Khan Company Limited (DGKC), Kohat Cement Company Limited (KOHC) and Fauji Cement Company Limited (FCCL) appeared favourable while smaller firms such Cherat Cement Company Limited (CHCC), Pioneer Cement Limited (PIOC), Fecto Cement Limited (FECTC), Gharibwal Cement (GWLC) and Power Cement limited also show potential.

3.5: Small and Medium Enterprises

Small and Medium Enterprises Development Authority (SMEDA) is the apex organization for development of the SME sector in Pakistan. It has an all-encompassing mandate towards fostering growth of SMEs alongwith 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 2014-15 are given below:-

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

- At the launch of PMYBL in 2013, Eighty Five (85) Business Pre-feasibility Studies were developed along with information resources and tools including, FAQs on Pre-feasibility studies, financial calculators, guidelines/template on developing business plan, and training video documentaries developed on various aspects of business.
- Rs. 13.78 million pre-feasibility studies and resources were downloaded from SMEDA website and 22,317 prospective loan applicants facilitated through SMEDA helpdesks after the launch of PMYBL. (727 prospective loan applicants have been facilitated during July-March 2014-15 and 1.65 million downloads were recorded).
- Business Development needs and handholding requirements of loan beneficiaries indentified through a multi ministerial national outreach program, coordinated by SMEDA.

ii. Special Projects with Internationals Development Partners

a) Economic Revitalization of Khyber Pakhtunkhwa and FATA(ERKF)

The Multi Donor Trust Fund (MDTF) project "Economic Revitalization of Khyber Pakhtunkhwa and Federally Administered Tribal Areas (FATA)" is a joint initiative for both Khyber Pakhtunkhwa and FATA to provide support to SMEs, attract diaspora investment, and strengthen institutional capacities to foster investment and implement regulatory reforms. The project is a response to the priority interventions indentified under the donor-supported Post Crisis Needs Assessment (PCNA) Report. The MDTF for Khyber Pakhtunkhwa, FATA and Balochistan was established to support the recommendations made in the PCNA report, and is being administered by the World Bank on behalf of 10 donors.

The Project is divided in three components:

Component 1: SME development
Component 2: Investment Mobilization
Component 3: Capacity Building to Foster Investment and Implement Reforms

The total cost of the project is US$ 20 million. Since July 2014, around 203 SMEs have been facilitated through the project that has resulted in rehabilitation of businesses and employment creation that has been adversely affected due to the security issue in the region.

b) Industry Support Services

SMEDA in collaboration with Japan International Cooperation agency (JICA), German Technical Cooperation (GIZ) and local experts, is providing technical assistance to SMEs across a range of industries to upgrade their skills and improve systems. Since July 2014, 20 industrial units have been direct beneficiaries of this program in the areas of efficiency and productivity. Major sectors facilitated under this program during current fiscal year are chemical and auto parts sectors. In order to broaden the scope of productivity, improvement activities across the value chain of auto sector and subsequently improving the share of localization of auto parts, SMEDA requested JICA for initiating a technical support program of Japanese way of improving productivity and quality. Subsequent to the visit of JICA detailed planning mission to Pakistan from September 22, 2014 till October 10, 2014, JICA has approved a 4 years project for Technical Support to Auto Parts Manufacturing Industry of Pakistan to be implemented by SMEDA under the guidelines of JICA technical experts. Under this program, technical support will be extended to 50 auto parts manufacturing units of Pakistan through five JICA technical experts. Out of 50 SMEs, around 10 SMEs would be developed as modal factories in the field of productivity and quality. Furthermore, development support system through capacity building programs of partner organizations and local experts is prime consideration of the project. Record of discussion was signed at Economic Affairs Division on January 29, 2015.

c) Revival of Investment Promotion Unit

Investment Promotion Unit in Collaboration with UNIDO revived at SMEDA for investment promotion in Pakistan SMEs and channelizing investment in high growth sectors. Feasibility study for establishing credit guarantee scheme for SMEs in Pakistan was conducted.

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

In Pakistan, lack of infrastructure and technology are major constraints that hinder SME productivity and competitiveness in the global market. To cope with the challenges, SMEDA initiated efforts in infrastructural development and technological up gradation under Public Sector Development Program (PSDP). During 2014-15, SMEDA continued with its portfolio of PSDP projects where currently, SMEDA is working on eight PSDP projects with a total cost of Rs. 586.61 million.

3.6: 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 minerals which have not yet evaluated. The mineral wealth of Pakistan contributes meagerly to its GDP. 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 ongoing schemes in PSDP 2014-15 includes "Appraisal of newly discovered coal resources of Badin coal field and its adjoining areas of Southern Sindh and "Exploration of tertiary coal in central salt range, Punjab" having total estimated cost of Rs. 170 million and 43.35 million respectively. One new scheme also included namely "Exploration and Evaluation of coal in Raghni area Tehsil Shahrig, Balochistan" having total cost of Rs. 56.78 million.

The Mining and Quarrying sector grew by 3.8 percent in 2014-15 as against 1.6 percent last year. Soap stone, Crude oil, Gypsum, Coal and Lime Stone posted a positive growth rate of 41.68 percent, 14.03 percent, 8.11 percent, 4.12 percent and 3.73 percent. However, some witnessed negative growth rate during the period under review such as Phosphate 47.75 percent, Dolomite 46.87 percent, Sulphur 42.06 percent, Bauxite 25.69 percent and Magnesite 7.44 percent (Table 3.15).

Table 3.15: Extraction of Principal Minerals

Minerals	Unit of Quantity	2012-13	2013-14	2014-15	% Change
Coal	M.T	2,813,079	3,140,439	3,269,846	4.12
Natural Gas	MMCFT	1,505,838	1,493,686	1,458,989	-2.32
Crude Oil	JSB(000)	27,840	31,583	36,015	14.03
Chromite	M.T	136,443	83,507	86,506	3.59
Magnesite	M.T	6,705	3,725	3,448	-7.44
Dolomite	M.T	335,819	673,042	357,576	-46.87
Gypsum	M.T	1,249,967	1,322,059	1,429,284	8.11
Lime Stone	M.T	38,932,472	36,463,310	37,822,871	3.73
Rock Salt	M.T	2,159,939	2,220,347	2,190,060	-1.36
Sulphur	M.T	20,610	35,672	20,670	-42.06
Barytes	M.T	118,471	132,379	132,046	-0.25
Bauxite	M.T	25,288	31,156	23,152	-25.69
Calcite	M.T	550	436	420	-3.67
Soap Stone	M.T	93,214	72,234	102,340	41.68
Marble	M.T	2,360,114	2,591,401	2,371,620	-8.48
Cooper	M.T	12,285	8,864	8,946	0.93
Phosphate	M.T	104,961	87,806	45,880	-47.75

Source: Pakistan Bureau of Statistics (PBS)

Balochistan

Balochistan has a rich endowment of mineral and energy resources. It possesses deposits of copper and gold, among other bulk minerals (lead, zinc, iron-ore), as well as construction materials, dimensional stone and gemstones, coal, and hydrocarbons. Development of the minerals sector has been identified as one of the most important levers to diversify the economy, create employment and raise government revenues. Chagai District in western Balochistan is on the Tethyan belt-a global geological trend extending from Europe to Asia which is home to many copper, gold and allied mineral developments. Within Pakistan, the Tethyan belt is best known where it passes through the northern half of Balochistan. While the eastern-most portions of the belt are extensively explored in Asia, the portion of the belt crossing Pakistan and neighboring Afghanistan is far less explored. Indeed, the global investment community recognizes the potential in Pakistan, but sites limited access to geological data available on which exploration can be centered. So, while the resource potential is clearly understood, it is widely recognized that Pakistan has largely missed a generation of modern prospecting, and that this represents an anomaly from a global exploration perspective.

The Mines and Mineral Development Department of the Government of Balochistan is promoting the resources of this area, responding to increased investor interest from high global commodity prices. Exploration results over the past decade indicate the presence of world-class copper/gold deposits and thus the potential for a resource corridor development approach.

Punjab

Mines and Minerals Department, Government of the Punjab is responsible for grant, surveys, exploration and development of mineral resources in addition to collection of rents, royalties and fees from the mining concessionaires. Other responsibilities include infrastructure development in mining areas and safety, health, welfare of mine workers. Pakistan is blessed with abundant natural resources. 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. Mines and Minerals Department is striving hard to follow a road map on mineral exploration projects planned by the Government of Punjab. Future vision of the Mines & Minerals Department is outlined as follows.

- 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
- To concentrate on the Development of Safety, Health and Welfare of Mine Workers

Achievements

Followings are the landmark achievements of the Mines & Minerals Department Government of the Punjab during the financial year 2014-15.

i. Revenue Receipts and Mineral Production

Mines & Minerals Department was given a target of Rs. 3000 millions and Rs. 320 millions in lieu of collection of royalty and excise duty on minerals. By the end of April, 2015, mines & minerals department has collected Rs. 2754 million and Rs. 289.385 million in lieu of royalty and excise duty, respectively and the department is on its path to achieve the given targets successfully.

ii. Local Coal Fired Power Plant

Mines and Minerals Department has shaped up integrated mine-mouth model for local and foreign investors who intend to invest in indigenous coal fired power plants. The coal quantity justifies the production of 1500 MW electricity in salt range in the shape of 1 × 300 MW plants in five zones. China Machinery and Engineering Corporation (CMEC) has been granted LOI by Pakistan Power Infrastructure Board (PPIB) on 19th November, 2014 under its fast track policy for establishment of 1 × 300 MW local coal fired power plant on integrated mine-mouth model at Khewra Pind Dadan Khan, district Jhelum. The Mines & Minerals Department has initially granted a coal exploration license to the company which will subsequently be converted into mining lease. Financial component of the project will be around $ 800 million with $ 500 million as Power Plant Component and $ 300 million as mining component. In this regard, a facilitation agreement has been signed during the current visit of President of China to Pakistan. The project is included in the priority list of projects of China-Pak Economic Corridor (CPEC).

iii. Chiniot-Rajoa Iron Ore

Mines & Minerals Department through an international competitive bidding process has awarded "Exploration and resource estimation of Iron ore and associated minerals at Chiniot Rajoa" project to M/S MCC,a Chinese company for resource estimation of iron ore and associated metallic minerals at international standards. The project commenced on 02.4.2014

and likely to complete within 18 months as per agreement. During the course of the project, successful discoveries of iron ore, copper and other precious metals has taken place and the results are encouraging for installation of a steel mill in the future. Prime Minister of Pakistan also graced the occasion of successful exploration of iron ore, copper and other precious metals at Chiniot. The resource estimation for potential iron ore of high quality and copper near Chiniot &Rajoa , respectively is being undertaken and the project is likely to be completed by December 2015. The high quality iron ore and copper ascertained by world highly accredited labs signify a new age of metallic exploration and the installation of steel mill based upon these resources will prove to be a game changer for the province and the country at large vis-à-vis its GDP growth and energy constraints.

iv. Geophysical Survey of Metallic Mineral Deposits

Mines & Minerals department has engaged Geological Survey of Pakistan (GSP) to undertake geophysical surveys and drilling to identify the anomalous zones of metallic minerals in the sub surface Pre-Cambrian shield rocks in Punjab plains, falling in districts Chiniot, Sargodha, Faisalabad, Nanakana Sahib, Kasur & Lahore etc. The essence of the project is to determine the metallic minerals potential as a future resource for the iron/metallic mineral based industries. Semi detailed magnetic survey of about 16000 sq.km area out of total 18000 sq.km area in the above districts is completed . Detailed magnetic, gravity and integrated geophysical surveys are in progress. The initial results revealed during the progress of the project are very promising as 32 promising anomalies have been detected during the semi detailed survey. A report regarding outcome of the geophysical surveys, drilling, sample testing etc. will be generated with the recommendations for the future resource estimation/development of the iron ore and associated metallic minerals in the Pre-Cambrian Indian Shield Rocks. The project is likely to completed in 2017.

v. Kalabagh Iron Ore

According to the historical estimates and past studies, vast iron ore deposits exists near Kalabagh, District Mianwali. The Government of Punjab is intended to establish an economical and viable process for making steel using Kalabagh Iron Ore. For this purpose, M/s IMC & SGA,a German Consortium is engaged through a competitive bidding process and subsequent revision in cost agreed is about Rs.142 million.

Development Programme

Following are the ongoing development schemes initiated by the Mines & Minerals department.

- Capacity Building of office of the Director General Mines & Minerals, Punjab, Lahore
- Geophysical Survey Of Sub Surface Pre-Cambrian Shield Rocks in Punjab for metallic mineral deposits
- Extension of Punjab School of Mines, Katas District Chakwal
- Establishment of 10 Bedded Mines Labour Welfare Hospital Chak No.119 S.B Sargodha
- Establishment of Mines Labour Welfare Girls Higher Secondary School at Chak No. 119/S.B Tehsil Silanwali District Sargodha
- Up gradation of Mines Rescue & Safety sub Station, Choa Saiden Shah
- Strengthening of Central Mines Rescue & Safety Station, Khushab

Benchmarks for 2015-16

- Implementation of installation of local coal fired mine mouth model power plant
- Finalization of "Exploration and resource estimation of Iron ore and Associated Minerals at Chiniot Rajoa" project
- Up scaling of SNOWDEN studies to the level of Business Pre-feasibility
- Defining and mapping resource corridor
- Establishment of Model Mines
- Establishment of Mineral Data Bank

Khyber Pakhtunkhwa (KPK)

The total area of Khyber Pakhtunkhwa is 74521 Sq Km out of which 70 percent consist of mountains and rocks. The formation of these rocks contains huge prospects of different metallic/non-metallic minerals and various

precious/semi-precious gemstones minerals. It has vast mineral resources which were not been exploited to its full potential. Based on the exploration done so far, excellent prospects of findings and discovering other valuable deposits exist.

The major achievements of minerals development department during year 2014-15 were:

a) Provision of Scholarship to the children of Mine Labours

During the current financial year 2014-15 scholarship to at least 300 deserving children of the mine labour studying in the following classes will be paid upto 30.06.2015 at the below mentioned rates:

Primary Classes (1st to 5th)	Rs. 600/-pm
Middle Class (6th to 8th)	Rs. 800/-pm
Matric Class (9th to 10th)	Rs.1000/-pm
Intermediate/Diploma Class	Rs. 1200/-pm
Bachelor Degree Classes	Rs. 1500/-pm
Master Degree Classes	Rs. 2000/-pm
Medical/Engineering & other Professional Classes	Rs. 3000/-pm

b) Water Supply Scheme (Tubewell)

To provide fresh drinking water to mine labours, 01. Water supply scheme is under completion at Bampokha District Buner. Establishment of 04 other water Supply Schemes for mine labours at different mining areas are under process.

Plan, Strategies and targets for 2015-16

- To initiate work on up gradation of mines labour welfare dispensaries to medical centres at Bampokha district Buner, Ghundo Tarako district Swabi and Jabba Khushk district Nowshera
- Establishment of new dispensaries at Beer district Haripur and Spinkai/Palo Dheri district Mardan
- Establishment of water supply schemes (Tube Wells) at Chungi No. 2 District Karak, Cherat Cement Factory District Nowshera and provision of water tankers for supply of water to labour engaged in coal mines at Jabba Khushk, Jabba Tar and Shakot areas of district Nowshera
- Grant in Aid to the Inspectorate of Mines for establishment of Mobile X-Ray Unit
- To initiate work on establishment of recreational center for mine labours at Bampokha District Buner, Cherat area district Nowshera and Ghundo Tarako district Swabi
- Reimbursement of expenditure incurred on medical treatment and subsistence allowance to mine labours throughout Khyber Pakhtunkhwa for patients of cancer, tuberculosis, hear diseases, kidney transplantation and other chronic diseases
- Continuation of award of scholarships to children of mines labour in Khyber Pakhtunkhwa
- Initiate work on establishment of housing scheme (Bachelor Barracks) at Cherat Cement Factory District Nowshera, Dewan Cement Factory District Haripur and at Laki cement Factory District Laki Marwat
- Grant in Aid to Mine Owners/Lease Holders for maintenance of standards dispensary services
- Reimbursement of expenditure for purchase of spectacles by the mine labours
- Full reimbursement of expenditure for artificial limbs to mine labours who lose limbs during work in mines

Sindh

The Mines and Mineral Department of Government of Sindh is the regulating & monitoring mining operations & activities in the mineral sector and also promote joint ventures especially with foreign investors for development of coal resources of the province. Government of Sindh has initiated safety oriented training facilities to mine workers to make them safety like rescue training facilities to mine workers to meet the challenges of rescue operation at the time of any mishap in the mines for the recovery of men and material. In this connection the government has approved four development schemes which are going on during the year 2014-15.

i. Establishment of central rescue station at Tharparkar

The scheme has been approved having total cost of Rs. 113.43 million with the objective to

conduct rescue operation at the time of any mishap in the mine and provider rescue training to about 500 mine personnel annually. An expenditure of Rs. 75.65 million has been made and now the same is under revision, due to escalation in price of construction material and machinery equipment besides including some additional civil work in the schemes.

ii. Establishment of mine polytrade training center at Lakhra

The scheme has been approved having total cost of Rs. 186.583 million with the objective to conduct short certificate courses for 50-100 mid level supervisor staff and on job training to 500 mine personnel as per provision of mining labour laws. The building of the center has been completed and during July -March 2014-15, the purchase of equipment and machinery amounting Rs. 3.65 million has been initiated.

iii. Establishment of central rescue station & occupational disease detection center at Lakhra

The scheme has been approved having total cost of Rs. 207.932 million with the objective to conduct rescue operation at the time of any misshape in the mine and provide training to about 500 mine personnel annually, besides detecting occupational diseases in the mine personnel. The building of the center has been completed and during July-March 2014-15, the purchase of equipment and machinery amounting Rs. 13.12 million has been initiated.

iv. Environmental impact assessment due to mining activities in Sindh

The scheme has been approved having total cost of Rs. 20.00 million with the aim to conduct through contractor environmental impact assessment due to mining activities in Sindh and mitigating measure to provide guideline for the mine operators. During the period July-March 2014-15, hiring of the consultant to conduct the said study have been completed and contract of Rs. 15 million have been awarded.

Conclusion:

Pakistan is well endowed with energy and minerals. To reap the benefit, government is focusing on a number of initiatives including specialized training, incentives for extraction and value addition; development of adequate infrastructure facilities near mining sites; learning from best practices in other countries regarding development of the mineral sector.