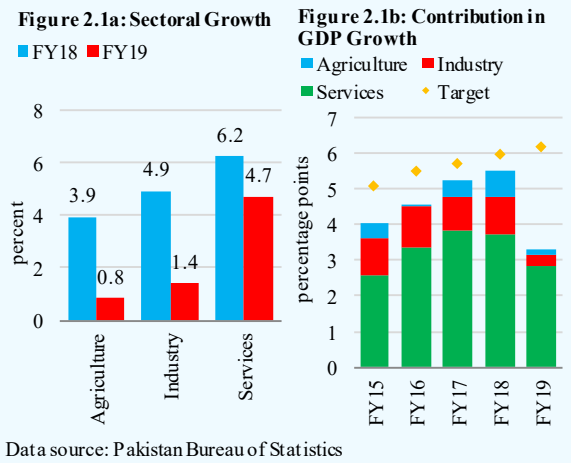
2 Economic Growth

2.1 Overview

Policy measures taken to subdue the twin deficits had a profound impact on economic activity during the year. Real GDP growth slowed to 3.3 percent in FY19 from 5.5 percent a year earlier, marking the downturn of the growth cycle. The fallout for the industrial sector (especially manufacturing activities) was quite severe, as reflected in the sector's squeezed contribution to GDP growth (**Figure 2.1**). Similarly, the agriculture sector fared poorly on the whole, as water shortages and costlier inputs dented the production of important crops. Growth in the services sector also decelerated visibly compared to last year, owing to its interlinkages with the commodity-producing sectors.



Data source: Pakistan Bureau of Statistics

The agriculture sector registered a marginal growth of 0.8 percent during FY19, in sharp contrast to 3.9 percent growth a year earlier. This was primarily due to a contraction in the production of the crop sector. A sharp decline in output of important crops offset the positive growth in minor crops. Production of major *kharif* crops (except maize) declined, while the main *rabi* crop, wheat, also showed contraction. The *kharif* months were characterized by a reduction in the area under cultivation, largely due to water shortages and low market prices for sugarcane, rice, and cotton in the preceding period. Regarding cotton production, **Box 2.1** touches upon some important aspects and policy lessons from peer countries that can be helpful in boosting output in future.

Furthermore, a hike in input prices during FY19 led to lower fertilizer offtake (particularly DAP) and inadequate application of pesticides, further affecting the yields. The situation noticeably improved in the *rabi* season as healthy rains reduced stress on water availability; however, other constraints persisted along with the lower fertilizer offtake. All these factors led to a decline in wheat yield for the second successive year, although the contraction was of a lower magnitude compared to FY18. Overall, the crop sector's contribution remained negative, and it was the livestock sector's sustained contribution which kept agriculture sector growth in the positive territory. This growth in livestock sector was attributable to contributions by milk and poultry production.

Meanwhile, industrial sector growth fell from 4.9 percent in FY18 to 1.4 percent in FY19, the lowest level in six years.[1] This can mainly be traced to a decline in large-scale manufacturing (LSM) and construction. Construction-allied industries felt the impact of lower public development expenditure and subdued private sector construction activities. In addition, the sugar industry's performance was adversely affected by surplus stocks during the earlier part of the crushing season[2]. In the second part of the season, lower availability of the raw material, sugarcane, hampered crushing activities. The automobile industry contracted due to various issues, such as a ban on purchase of cars by non-tax-filers, increase in vehicle prices prompted by exchange rate depreciation, and higher financing costs.

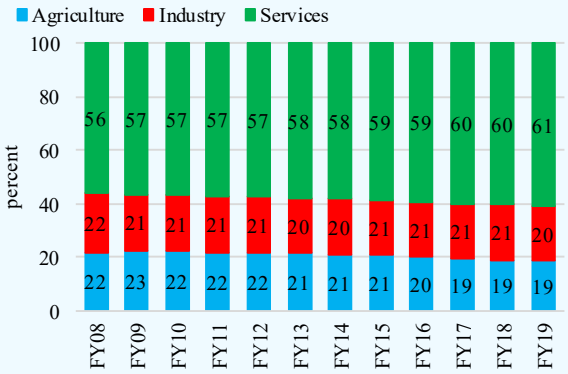
[1] The previous low for the industrial sector's growth (0.75 percent) dates back to FY13.
[2] Sugar mills start their operation in October-November and the season ends in March-April the following year.

Besides the underwhelming results of LSM and construction sectors, mining and quarrying also posted a decline on the back of lower output of coal and natural gas extraction. That said, a silver lining worth mentioning is that significant growth in *electricity generation and electricity and gas distribution* kept overall industrial growth in the positive.

In line with the subdued performance of the commodity-producing sectors, growth in the services sector slackened to 4.7 percent during FY19, compared to 6.2 percent a year earlier. *Wholesale and retail trade*, which accounts for a significant share of the country's GDP, saw its growth nearly halve compared to FY18. Nonetheless, anecdotal evidence regarding the growing popularity of e-commerce activity and mega shopping malls suggests that a certain component of domestic sale of goods and services performed well; this impression is further supported by a 7.2 percent increase in sales tax collection excluding POL products during FY19, compared to 4.8 percent growth in the preceding year (for details, see **Chapter 4**). *Finance and insurance activities* also faced moderation, as deposit generation and lending to the private sector by scheduled banks was relatively lackluster for the greater part of the year. Also, while *general government services* experienced a slowdown compared to FY18, the segment's growth remained relatively robust on account of the real increase in remunerations and pensions of serving and retired government employees respectively. Among the positive developments, growth in road transport services nearly doubled compared to last year.

As it stands, the rising share of the services sector, at the expense of industry and agriculture, needs to be addressed (**Figure 2.2**). The country largely produces non-tradable services that are consumed domestically. At the same time, industrial output, exports and FDI have faltered. This pattern needs to be corrected in order to make the trade deficit sustainable in the years to come. Putting in place a coherent industrial policy should be among the immediate priorities, while a gradual shift away from non-tradable services in favor of exportable services should also be pursued in the medium term.

Figure 2.2: Sectoral Share in GDP*



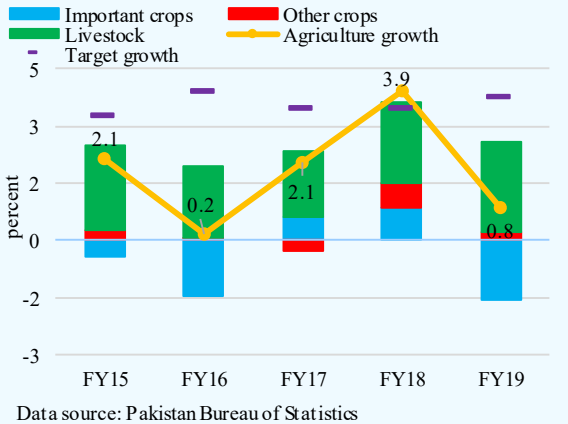
* Rounded off to nearest whole number; shares may not sum to100

Data source: Pakistan Bureau of Statistics

2.2 Agriculture

The agriculture sector's performance remained below target as the sector registered a marginal growth of 0.8 percent in FY19 compared to a notable growth of 3.9 percent last year (**Figure 2.3**). After two consecutive years of commendable performance in FY17 and FY18, the sector's growth contracted due to subdued crops sector output. This was largely on account of considerable decline in production of important crops, with the exception of maize. The *kharif* season months were characterized by reduction in area under cultivation largely due to water shortages and low preceding period market prices for sugarcane, cotton and rice. Furthermore, decline in yields was also noticeable, resulting from the hike in input prices that led to lower

Figure 2.3: Contribution to Agriculture Sector Growth



Data source: Pakistan Bureau of Statistics

fertilizer offtake and inadequate application of pesticides. While the *rabi* season improved as healthy rains reduced the stress on water availability, lower fertilizer offtake led to minimal yield growth for wheat as other factors persisted. The important crops sector contracted by 6.6 percent in FY19, compared to a growth of 3.6 percent in FY18.

While minor crops' growth of 2.0 percent was weaker than an impressive growth of 6.2 percent in FY18, improvements were seen in the production of oilseeds (growth of 22.4 percent) and pulses (growth of 23.5 percent) as compared to last year. Eventually, it was the livestock sector's sustained growth of 4.0 percent, which pushed the agriculture sector growth to the positive territory.

Inputs

On the input front, water availability remained under stress as irrigation water availability in the cropping period (April 2018- March 2019) was 10.4 percent lower compared to FY18. Shortages in FY19 were felt more heavily during the *kharif* season, as total availability was14.8 percent lower than last year. The situation in Sindh, where the groundwater is largely saline, was acute. In Punjab, however, farmers resorted towards tubewells. The prolonged dry spell ended when healthy rainfalls in Q2-FY19 provided relief to farmers in the *rabi* season.

With the lower water availability and the hike in prices, fertilizer offtake contracted by a considerable 6.8 percent in FY19 as compared to a growth of 8.6 percent in FY18. Offtake of urea and DAP dropped by 4.2 percent and 13.9 percent respectively in the FY19 cropping season. This is owed to the strong rise in prices as compared to the last two years. Urea offtake improved slightly in the *rabi* season; however, DAP offtake further receded, leading to a double-digit fall in the total cropping season offtake (**Table 2.1**). The price of DAP rose due to increase in international price and pass through of the PKR depreciation, while urea prices rose due to an increase in the gas tariffs and withdrawal of subsidy.[3]

Table 2.1: Fertilizer Off-take and Prices

offtake in thousand tons; prices Rs per 50 kg bag; growth in percent

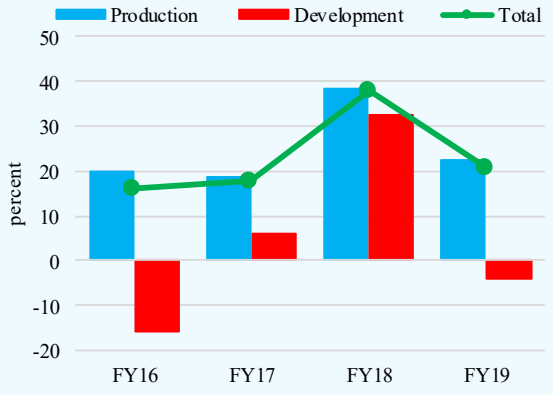
		Offtake			Prices		
		Kharif	Rabi	Total	Kharif	Rabi	Average
Urea	2017	2,704	2,892	5,596	1,648	1,369	1,508
	2018	3,234	2,944	6,178	1,336	1,404	1,370
	2019	2,887	3,033	5,920	1,549	1,783	1,666
	Growth	*-10.7*	*3.0*	*-4.2*	-	-	
DAP	2017	696	1,607	2,303	2,849	2,544	2,696
	2018	994	1,403	2,397	2,597	2,860	2,729
	2019	901	1,164	2,065	3,251	3,576	3,414
	Growth	*-9.4*	*-17.0*	*-13.9*	-	-	-

Kharif is Apr-Sep and Rabi is Oct-Mar

Data source: National Fertilizer Development Center

Given the performance of the crop sector, agriculture credit grew at a lower rate of 20.7 percent in FY19 against 38.1 percent in FY18, with total disbursements reaching Rs 1,174 billion. The growth in disbursements was due to a notable growth in production loans, which are mainly driven by expansion in loans to corporate farming. In contrast, development loans, after notable growth in FY17 and FY18, contracted by 4.1 percent due to lower purchase of tractors and other machinery (**Figure 2.4**). Disbursements to non-farm sector also showed healthy growth, amid rising demand for meat and livestock products.

Figure 2.4: Growth in Agriculture Disbursements



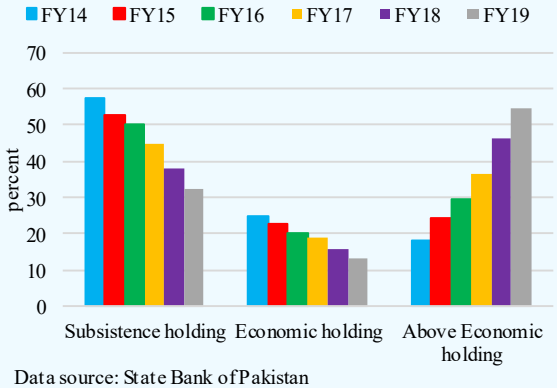
Data source: State Bank of Pakistan

[3] Cash subsidy on urea, at Rs 156 per bag in FY17 and Rs 100 in FY18, was completely eliminated in FY19.

Output

In FY19, the crop sector contracted on account of decline in production of all major *kharif* and *rabi* crops, with the exception of maize (**Table 2.2**). Growth in minor crops, though positive, was noticeably lower compared to FY18; however, oilseed crops' production improved. The contraction in *kharif* crops was largely due to lower area under cultivation as total area under sugarcane, rice and cotton declined by 9.5 percent on YoY and was the lowest in the last 9 years. Furthermore, improvements in yields were insufficient to cover the area losses. At the provincial level, area under major crops in Sindh declined for all crops by a significant 16.3 percent.

Figure 2.5: Holding-wise Disbursements as a Percentage of Total Farm Sector Disbursements



Data source: State Bank of Pakistan

Table 2.2: Performance of Important Crops

growth in percent

				Growth	
	FY17	FY18	FY19	FY18	FY19
Area (in thousand hectares)					
Cotton	2,489	2,700	2,373	8.5	-12.1
Rice	2,724	2,901	2,810	6.5	-3.1
Sugarcane	1,218	1,343	1,102	10.3	-17.9
Wheat	8,972	8,797	8,771	-2.0	-0.3
Maize	1,348	1,251	1,318	-7.2	5.4
Production (in thousand tons; for cotton, thousand bales)					
Cotton	10,671	11,946	9,861	11.9	-17.5
Rice	6,849	7,450	7,202	8.8	-3.3
Sugarcane	75,482	83,333	67,174	10.4	-19.4
Wheat	26,674	25,076	24,279	-6.0	-3.2
Maize	6,134	5,902	6,309	-3.8	6.9
Yield (in kilograms per hectare)					
Cotton	729	752	706	3.3	-6.1
Rice	2,514	2,568	2,562	2.1	-0.2
Sugarcane	61,972	62,050	60,956	0.1	-1.8
Wheat	2,973	2,851	2,768	-4.1	-2.9
Maize	4,550	4,718	4,787	3.7	1.5

Data source: Pakistan Bureau of Statistics

Kharif Crops

Cotton

The year-end production numbers for cotton crop showed a significant dip to 9.9 million bales after two consecutive seasons of gradual recovery in FY17 and FY18. Registering the second-lowest production in the last 10 years, this was a result of a double-digit decline in cultivated area. The contraction in area was 12.1 percent, of which the major share was in Sindh. Contraction in area was mainly due to two main reasons: i) water shortages experienced specifically in Sindh; and ii) lower prices leading to lower returns in the preceding season. Seed cotton prices averaged at Rs. 2,928 per 40 kg for Sept-Mar 2018, compared to Rs. 3,401 for Sept-Mar 2017, a decline of 16.2 percent.

In addition to fall in area under cultivation, yield also declined by 6.1 percent. This is reflected by lower per hectare production in Punjab (**Table 2.3**), despite an improvement in Sindh. The decline in yields was largely due to: i) attack of pests in the harvest season; and ii) adoption of poor agronomic practices.[4] While production growth is mainly driven by enhancement on the area front, improvement in yields through better quality seeds is required. The policy makers are in a process of designing a policy for cotton improvement; however, a major focus area for now is the introduction of a cotton indicative pricing. Indicative pricing is aimed at improving area under the crop, yet there are other aspects and policies that need to be considered. (**Box 2.1**).

[4] Source: Weekly update on Cotton Crop, various issues during FY19

Box 2.1 Cotton Policy: Indicative Pricing & Other Important Aspects to Focus On

The output of cotton crop, which is one of the major cash crops and is crucial for the textile industry, has been significantly lower than the demand in the last several years. Despite being one of the top producers of cotton in the world, Pakistan imports better grade cotton for blending and production of export quality textile products. The average annual local mills' consumption of cotton stands at 13-14 million bales.[5] However, cotton production, which averaged 12.9 million bales per year between FY10-FY15, has dropped to 10.6 million bales on average since FY16, significantly below the government's annual targets. Hence, the shortage in last several years has been an average of 3-4 million bales. The production shortfalls have been the result of reduced area under crop and lower yields (**Figure 2.1.1**). To increase production, one solution is to introduce an indicative pricing mechanism. While the government is still contemplating on it and any details are yet to come out, it is to be noted that the policy of indicative pricing requires significant effort on the part of the government to stimulate private sector procurement at indicative prices. This will have to discard the international pricing benchmark that governs the domestic price of cotton at present. This box highlights the existing policies for cotton in Pakistan and identifies production issues. Furthermore, besides pricing, other important aspects for high and sustainable level of cotton production are discussed with lessons drawn from peer countries.

Existing policies for cotton:

Historically, intervention in the cotton market had been relatively limited as compared to other major crops. Production of the crop is dominated by private farmers, benefiting from the policy of subsidies on inputs such as water and fertilizer, similar to all other crops. Furthermore, the provincial governments have implemented policies for disbursement of seeds at subsidized rates to farmers. At the marketing stage, ginners and spinners purchase cotton at market rates where prices are based on market dynamics and international pricing trends; hence, intervention by the government on this front is absent. On the trade front, Pakistan generally observes minimal tariff restriction on imports; however, to limit inflows and encourage local crop

Figure 2.1.1a: Cotton Area and Yield Trend

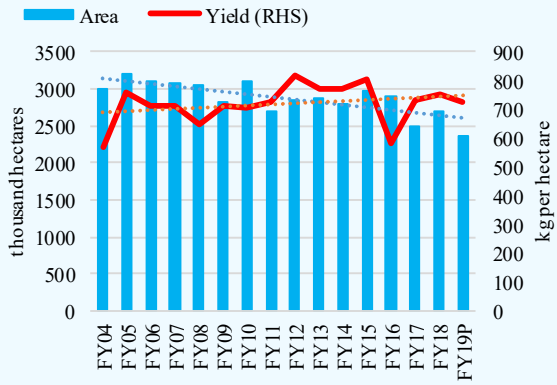
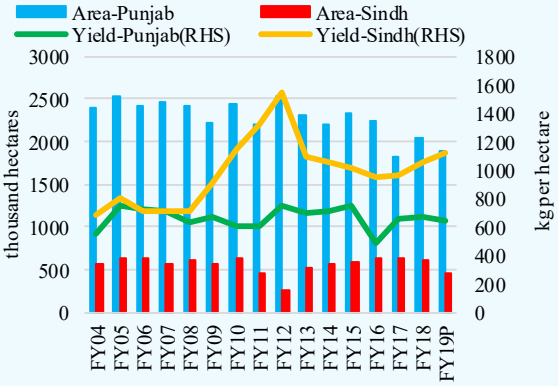


Figure 2.1.1b: Province wise Area and Yield



Data source: MNFSR

consumption, the government imposes tariffs during the harvest season (Jul-Dec). The tariffs are eliminated from January onwards, depending on the size of domestic supply. In Jul-Dec 2018, a 4 percent tariff and a 5 percent sales tax was imposed on imported cotton, whereas domestic cotton was exempted from sales tax. However, due to lower domestic production and absence of high quality varieties, cotton imports have remained significant.

Issues in production:

- The growth rate in production is highly correlated with area under the crop. The area under cultivation has recently been dwindling mainly because of lower profitability of the crop, as it is in direct competition with rice – the exportable crop – and sugarcane, which requires lower usage of fertilizer and is less susceptible to disease. (**Figure 2.1.1a**). Comparison of the cost of production of cotton and other crops shows that return to overall investment is higher for sugarcane and rice.[6]

[5] Source: Pakistan Central Cotton Committee

[6] According to the calculation on the 2015-16 crops, returns to overall investment in Punjab for sugarcane were Rs 237 per day of crop duration and Rs 225 per day for rice. Compared to this, cotton earned farmers Rs 209 per day. In Sindh, sugarcane farmers received Rs 232 per day of crop duration and compared to this cotton farmer received Rs 205 per day. Furthermore, sugarcane earned farmers comparatively higher return of Rs 3.86 per rupee of purchased inputs cost, while cotton earned Rs 2.64 per rupee of input cost in Punjab. Source: Cotton Policy Analysis for 2016-17. Agriculture Policy Institute. MNFSR

- On the yield front, significant gains were achieved 15 years ago when BT cotton entered the market. The average yield between FY00-FY04 was 607 kg per hectare; it jumped to 709 kg per hectare between FY05-09 and 758 kg per hectare between FY10-FY14. Currently, 95 percent of the area is covered in the old generation of BT cotton, a type that presents challenges to farmers due to its increasing ineffectiveness against bollworms. Due to slow process of patenting, Pakistan has been behind its neighbors in enhancing yields and production through the introduction of the latest seeds in the BT line-up.

Policy considerations and lessons from other countries:

In such a situation, policymakers are aiming to implement indicative pricing as part of the cotton policy to encourage area under the crop. However, as highlighted above, the indicative pricing might not be enough and complimentary policies focusing on yields, improved inputs and financing are required. Following are the key policy suggestions and lessons from other countries:

- **Improving agronomic practices**: The issue of production also stems from poor agronomic practices in terms of application of pesticides, picking practices and irrigation application. The pricing policy itself provides limited incentive for farmers to increase yields through adoption of better quality seeds and agronomic practices. As has been observed for both wheat and sugarcane, the gains in yield have been minimal, since most growth in production is achieved through area enhancement. Improving extension services and involving ginners and millers in the farming might improve this process.
- **Seed quality improvement through system of intellectual rights and agreements:** Even though BT cotton was introduced 15 years ago by some progressive farmers, yet it was officially recognized only in 2009, and first grown in 2010. To overcome the delays in official introduction of proper seed technology, improvement in policies such as patenting and licensing of seeds is crucial. The enforcement of the amended Seed Act 2015 and the Plant Breeder's Act of 2018 is key for further improvements in the sector, with provision of necessary intellectual property rights. The Plant Breeders Act will further enhance the development of new variety of seeds. Also, agreements with reputed international biotechnology firms would facilitate the adoption of new generation pest resistant seed varieties. As compared to Pakistan, India in 2002 legally introduced the BT cotton technology through agreement with Monsanto. There the improved systems of intellectual property rights and availability of legal seeds largely prevented the penetration of low quality fake seeds.
- **Financing for high quality seeds**: Access to credit is crucial for the purchase of high-yielding seeds and adoption of improved technology. One example is China, which has been providing subsidized credit to cotton farmers to obtain better quality seeds. Attractive financing options mean that farmers will focus on buying good quality seeds and resultantly the final product will improve.
- **Crop insurance for changing weather patterns**: The cotton crop is more prone to weather changes, as rainfall at harvest times and high levels of humidity result in the emergence of various pests. Going forward, climate change is expected to further increase weather unpredictability, leading to further losses. Despite indicative pricing, production might suffer unless the agronomic practices are improved, while also taking account of weather conditions. Given the erratic weather nature and climate change, insuring cotton farmers under a comprehensive insurance policy is needed to mitigate risks and increase investment. Several Asian countries, such as India, Thailand, and Vietnam, have developed government subsidized insurance systems that protect small farmers and mitigate the risk of crop damages. In FY19, Punjab implemented an insurance program for cotton farmers under the World Bank SMART program, compensating a small number of participating farmers for yield shortfalls. However, such a program needs to be implemented across the country to increase investment in high quality inputs and introduce better crop management practices.
- **Targeted subsidy:** A targeted subsidy might be better, as observed in the case of China. In 2017, China started a target price-based subsidy policy for Xinjiang, one of its major provinces where yields were relatively higher. Since then, Xinjiang has received higher subsidies compared to other provinces, motivating farmers in other, lower yield cotton producing regions to switch to other important crops. Furthermore, instead of announcing the price every year, the Chinese government announces it every three years, to curb fluctuations in annual output. In similar vein, policies at the district level in Pakistan may be implemented to encourage production in districts with higher yields to achieve maximum production rather than an overall indicative pricing.

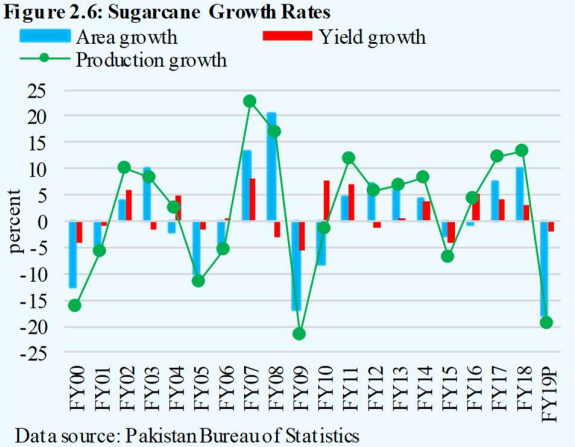
Given the highlighted issues in area and production, in addition to an introduction of indicative pricing, a multi-pronged approach needs to be adopted to ensure higher quality and sustained production levels.

Sugarcane

Sugarcane production declined to 67.2 million tons, compared to a record output of 83.3 million tons last year. The double digit drop resulted from a sizeable reduction of 17.9 percent in area under cultivation in all provinces due to delay in payments to growers in the preceding season, coupled with water shortages. Area shrunk by double digits in Punjab and Sindh, while cultivated area in the latter was the lowest in the last 6 years. Moreover, decline in yields compounded the impact of reduced area. Decline in yields was a result of lack of high yielding varieties and inadequate fertilizer and pesticide usage.

In order to incentivize the farmers to grow enough sugarcane that can fulfill domestic demand for sugar, the government continued its policy of indicative pricing in FY19. However, the price was kept unchanged between Rs 180-182 per 40 kg – its FY18 level – despite the inching up of the cost of production.[7] This, along with the backlog of payments to the sugarcane farmers amid unsold surplus sugar stock, played the major role in holding back sugarcane production. Since similar issues have been recurring for the past few years, there are hardly any incentives to enhance yields, let alone to bring more area under cultivation (**Figure 2.6**). In the FY20 budget, the government, in its agriculture sector plan, has targeted an improvement in yields, which is a step in the right direction.[8]

Figure 2.6: Sugarcane Growth Rates



Data source: Pakistan Bureau of Statistics

Rice

Despite a 3.3 percent drop, rice production surpassed its target and reached a decent 7.2 million tons in FY19. The YoY decline was largely the result of a double digit decline in area under cultivation in Sindh, which led to a 9.8 percent contraction in the province's production. Plantation in Sindh was the lowest in the last 5 years, and even though yield per hectare rose by 8.2 percent, it was still insufficient to cover the fall in area.

Detailed data at the variety level shows that even though production of basmati variety delivered gains, the expansion was unable to offset the decline in irri and hybrid varieties (**Table 2.4**). In Sindh, the major producer of non-basmati varieties, severe early sowing period water shortages resulted in lower area under cultivation, while marginal improvement was observed in basmati cultivation. Going forward, if water shortages persist, it would hamper cultivation of non-basmati varieties.

Table 2.4: Rice Crop Variety-wise Area and Production

growth in percent

	Punjab			Sindh		
	FY18	FY19	Growth	FY18	FY19	Growth
Area (in thousand hectares)						
Basmati	1416.4	1473.0	4.0	55.2	57.4	4.0
Irri	134.8	133.5	-0.9	351.6	262.0	-25.5
Hybrid	-	-	-	393.9	351.3	-10.8
Total	1840.9	1903.9	3.4	828.4	690.3	-16.7
Production (in thousand tons)						
Basmati	2816.6	2949.2	4.7	76.5	79.0	3.3
Irri	362.5	351.1	-3.2	878.3	761.4	-13.3
Hybrid	-	-	-	1863.1	1706.0	-8.4
Total	3898.0	3979.1	2.1	2850.4	2571.1	-9.8
Yield (in kg per hectare)						
Basmati	1988.6	2002.2	0.7	38.6	37.6	-2.5
Irri	2690.1	2630.0	-2.2	149.8	190.6	27.2
Hybrid	-	-	-	373.0	385.9	3.5
Total	2117.5	2089.9	-1.3	244.1	272.5	11.6

Data source: Pakistan Bureau of Statistics

Rabi Crops

Wheat

Wheat production was recorded at 24.3 million tons, which according to the latest estimates stands 4.9 percent short of the target of 25.5 million tons.[9] This shortfall in production was the result of untimely rainfall and unforeseen hailstorms in the harvest period. The contribution of cultivated area to production was satisfactory, as area under cultivation marginally declined to 8.7 million hectares compared to 8.8 million hectares in FY18. However, untimely rains in Q3-FY19

[7] The cost per 40 kg at mill gate in FY19 was calculated at Rs 179.0 for Punjab and Rs 178.1 for Sindh (source: MNFSR).
[8] Source: PM's Agriculture Emergency Program- Pakistan Economic Survey 2018-19- Ministry of Finance.
[9] This production level for wheat is different from the one in the Economic Survey of Pakistan 2018-19, as it incorporates losses due to rainfall. Data source: Brief on Wheat 16.09.2019 by Ministry of National Food Security & Research.

caused noticeable damage to the standing crop, resulting in production falling below the 25 million-ton mark for the first time in six years.

This second consecutive yearly decline in wheat production was primarily due to four developments: (1) delayed cane crushing led to decline in area under cultivation; (2) inadequate nutrient offtake, particularly potash (-13.0%) and phosphorous (-13.8%) during Oct-Feb due to higher prices, which resulted in lower yield; (3) heavy rains in the harvest period, particularly in mid-April that resulted in crop losses, especially in southern Punjab; and (4) higher prevalence of rust disease due to untimely rains.

Another important reason for decline in area under cultivation and lower yields in the last 2-3 years could be the unchanged support price amidst increasing input prices, which reduced the crop's profitability. The support price offered to farmers has been Rs 1,300 per 40 kg, which was last changed in FY14 from Rs 1,200. The positive impact of the support price on production seems to be over as farmers' returns have substantially been squeezed due to hike in prices of major inputs, such as fertilizer, seeds and labour. The analysis of *rabi* period data for fertilizer shows that urea and DAP prices increased by 30.2 percent and 40.1 percent respectively since FY17.

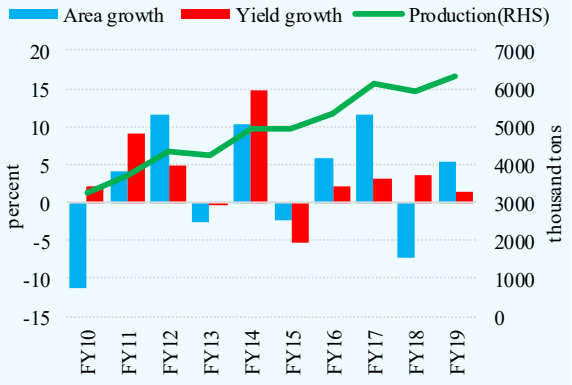
The stocks of wheat at the start of May 2019 were 3.8 million tons compared to 7.3 million tons in May 2018. However, despite this, the total procurement was 4.0 million tons, significantly lower than the revised target of 5.2 million tons and last year's procurement of 5.9 million tons.[10] The decrease in production and lower stocks compared to last year led to farmers receiving better prices, particularly in Punjab. Prices rose on account of lower supply and higher demand. Raw wheat market prices at the national level rose on average by 6.9 percent during Apr-Jun FY19 compared to the same period last year.

Maize

In sharp contrast to other important crops, maize crop performed much better, with production rising 6.9 percent YoY to a record high of 6.3 million tons. The notable performance was primarily the result of a recovery in area under cultivation of 5.4 percent, after a reduction of 7.2 percent in FY18 (**Figure 2.7**). The expansion in cultivated area was mainly in Punjab, with a growth of 9.5 percent. In case of Khyber Pakhtunkhwa (KP), with contribution to total land of 35 percent, improved production was achieved on the back of yield enhancements.

The crop has rapidly expanded its share within the important crops, increasing from 8.8 percent in FY15 to 11.8 percent in FY19. The growth is primarily attributable to the use of hybrid seeds and the complete package of extension services and technology transfer provided by private seed companies. Government intervention in the corn crop is limited to 30 percent duty on imports to protect producers. The trade is limited to the private sector, with the poultry sector being the major consumer of the crop. Hence, the manufacturers have heavily invested in the research of seed and provide advisory services and technology transfer. The country's third

Figure 2.7: Maize Production, Area and Yield

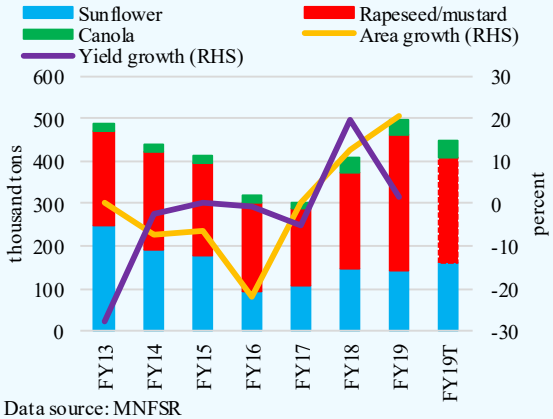


Data source: Pakistan Bureau of Statistics

[10] Data source: SUPARCO Monthly Bulletin Vol 9 Issue 6, June 2019

largest grain crop previously showed impressive yield improvements in FY14, but the yield gains have gradually slowed down, with improvement of only 1.5 percent coming in FY19 (**Figure 2.7**). Further research and improved agronomic practices are needed to boost the yields further.

Figure 2.8: Oilseeds Production, Area and Yield Trends



Data source: MNFSR

Other Crops

The growth in minor crops, despite being positive, remained lower than FY18's growth rate. A breakup of the data shows that oilseeds performed noticeably better, continuing on a path of production recovery since FY17, with production growth of 22.4 percent YoY. The total oilseeds output achieved the target largely due to improvement in rapeseed & mustard production. Canola and rapeseed/mustard showed commendable growth of 10.5 and 41.3 percent respectively.

The encouraging performance was primarily driven by improved area under the crop which grew by 20.4 percent, while yield growth was a minimal 1.7 percent (**Figure 2.8**). Province-wise breakdown reveals that sunflower sowing in Sindh and canola and rapeseed/mustard sowing in Punjab were the main drivers of the noticeable area growth. Lack of timely availability of seeds led to lower than target area under crop for sunflower in Punjab with farmers shifting to canola and rapeseed/mustard. Whereas in Sindh, availability of good quality seeds led to higher production of the sunflower crop. Going forward, the Punjab government's efforts to provide certified seeds at subsidy is expected to enhance sunflower and sesame seed output.

Livestock

The livestock sector grew at a higher rate of 4.0 percent in FY19 against 3.7 percent last year, offsetting the impact of negative growth in crop production. The sector's performance was mainly driven by value additions in milk and related products, which has the highest share in gross output (**Table 2.5**).

Table 2.5: Value Added in Livestock

billion Rupees; growth in percent

	FY18	FY19	Growth	
			FY18	FY19
A. Gross output	1,666	1,724	3.4	3.5
Animal sold for slaughtering	381	392	2.9	2.9
Natural growth/regeneration	231	238	3.0	3.0
Livestock products	872	898	3.0	3.0
Milk	747	771	3.2	3.2
Others	125	127	1.5	1.6
Poultry products	175	189	7.8	7.9
B. Intermediate consumption	291	294	2.9	1.0
C. Gross value added (A-B)	1,375	1,431	3.6	4.0
D. Other GVA*	9	9	19.4	4.9
E. Total GVA	**1,384**	**1,440**	**3.7**	**4.0**

R: Revised, P: Provisional, * hunting & animal husbandry

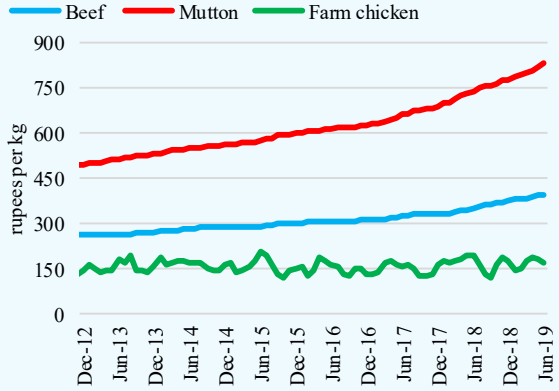
Data source: Pakistan Bureau of Statistics

The federal level data shows continued growth of the livestock sub-sector, averaging at 3.5 percent during FY13-FY19, in contrast to other major sub-sectors within the agriculture sector. Derived mainly from increase in animal production and its impact on the livestock products, this growth, on aggregate level, is in contrast to several developments: (i) fodder crop, one of the main livestock inputs, declined by 1.4 percent this year, while the production of most cereal crops contracted as well; and (ii) the Livestock Census conducted by Punjab in 2018 reveals that the milk production was around 18 billion liters in 2018,

which is not much different from the average production during 2006 and 2015.[11] This was largely due to the fact that in Punjab the cattle and buffalo herd population, according to the Livestock Census 2006, Agriculture Census 2010 and the latest Punjab Livestock Census 2018, stagnated at around 29 million.

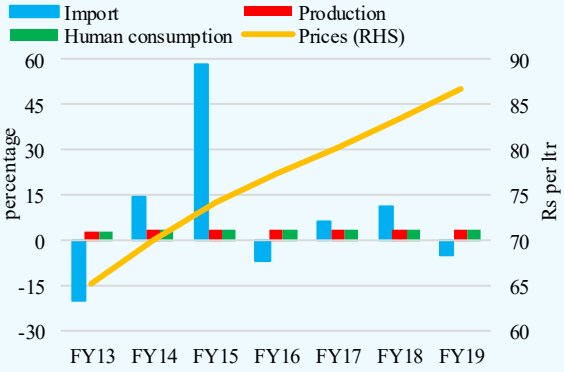
Another important trend observed over the years is the growth in prices of beef, mutton and milk. On the other hand, market prices of poultry have stabilized between Rs 100 to Rs 200 per kg of live broiler, which is in line with the higher investment in the poultry sector and the rapid emergence of poultry farms. However, the upward trend in mutton and beef production shows less consummate growth, recorded at 4.7 percent for FY19, to meet the rising external and domestic demand (**Figure 2.9**).

Figure 2.9: Livestock Products Prices



Data source: Pakistan Bureau of Statistics

Figure 2.10: Growth in Milk, Production Consumption and Imports



Data source: Pakistan Bureau of Statistics

Furthermore, in the milk market, the data published by PBS and generated by the MNFSR shows that consumption and production on average grow at the same rate. However, the yearly growth in milk imports shows fluctuations that are not in line with production and consumption growth rates. This makes it hard to understand if domestic milk production was in line with domestic milk demand or if there was any mismatch. The impact of exchange rate depreciation could be a reason for decline in milk imports during FY19 (**Figure 2.10**), but to substantiate the exact input and output situation in the sector there is a need to conduct the long due National Livestock Census. This will facilitate in establishing the true population of animals and quantity of milk and meat produced every year.

2.3 Industry

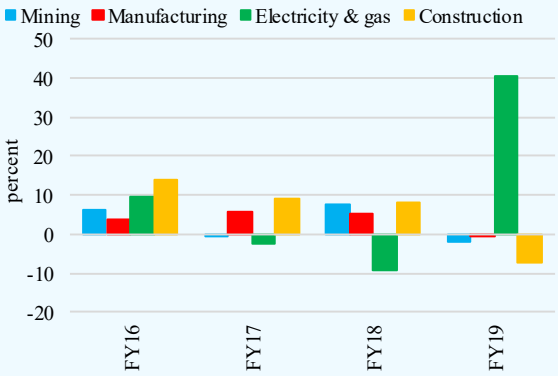
Growth in the industrial sector slowed down from 4.9 percent in FY18 to 1.4 percent in FY19. The major drag came from the manufacturing subsector, which carries the highest weight in the industrial sector. Within manufacturing, small-scale processing and slaughtering segments were able to maintain a similar level of growth as last year. However, the LSM sector was not able to withstand constraining economic environment triggered by exchange rate depreciation and contractionary monetary and fiscal policies. LSM performance turned negative for the first time in the last 10 years, as it fell by 3.6 percent in FY19 against positive growth of 6.4 percent in FY18.

Meanwhile, mining & quarrying and construction segments also witnessed notable declines during the year after posting healthy growth last year. Mining registered negative growth that can be traced back

[11] Source: Livestock Census Punjab 2018. Available online at http://www.livestockpunjab.gov.pk/LiveStockAdmin/uploads/editor_files/livestock_census_punjab_2018_sven4.pdf

to a decline in natural gas and coal extraction. Construction activities in the country dipped sharply on account of lower PSDP expenditure as well as a slowdown in the rest of the economy.

Figure 2.11: Industrial Subsectors Growth



Data source: Pakistan Bureau of Statistics

On an encouraging note, the growth of electricity generation and electricity and gas distribution subsectors turned positive. From the contraction of 9.1 percent in FY18, it increased by 40.5 percent in FY19, phenomenally exceeding the target of 7.5 percent (**Figure 2.11**). The growth in this sector can largely be attributed to increase in expenditure on gross fixed capital formation for capacity additions in the past few years, adjustment in energy prices, and higher consumption of electricity. That said, investment has now shifted from production towards development of transmission network, particularly in Karachi. This is evident from significant pick-up in fixed investment loans by the power sector.

Large-Scale Manufacturing

LSM witnessed contraction of 3.6 percent in FY19 against healthy growth of 6.4 percent in FY18. (**Table 2.6**). Barring electronics and fertilizer industries that posted noteworthy increases, a broad-based decline was recorded in FY19 in the rest of the sector. Construction-allied, automobile and POL industries, which had driven LSM growth in the past four years, experienced downturns as contractionary economic policies took hold. Moreover, two large industries, textile and food, with a combined share of 47.3 percent, also registered declines.

Table 2.6: Growth in LSM
percent

	Weight	Growth			Contribution in growth		
		FY17	FY18	FY19	FY17	FY18	FY19
LSM	70.3	5.8	6.4	-3.6	5.8	6.4	-3.6
Textile	20.9	0.8	0.5	-0.2	0.2	0.1	0.0
Cotton Yarn	13	0.7	0.1	0.0	0.1	0.0	0.0
Cotton Cloth	7.2	0.4	0.0	0.2	0.0	0.0	0.0
Jute Goods	0.3	8.1	23.9	-9.5	0.0	0.0	0.0
Food	12.4	11.7	3.0	-7.2	2.4	0.6	-1.5
Sugar	3.5	37.8	-6.8	-19.9	2.5	-0.6	-1.5
Cigarettes	2.1	-35.8	72.0	2.8	-0.7	0.8	0.1
Vegetable Ghee	1.1	3.1	10.7	-2.8	0.0	0.1	0.0
Cooking Oil	2.2	2.7	0.7	2.1	0.1	0.0	0.1
Soft Drinks	0.9	13.7	0.3	-6.3	0.4	0.0	-0.2
POL	5.5	2.8	13.2	-8.4	0.2	0.8	-0.5
Steel	5.4	20.5	21.8	-11.2	0.7	0.8	-0.5
Non-Metallic Minerals	5.4	4.4	11.0	-2.4	0.5	1.2	-0.3
Cement	5.3	4.5	11.1	-3.0	0.5	1.2	-0.3
Automobile	4.6	11.2	17.8	-11.8	0.7	1.2	-0.9
Jeeps and Cars	2.8	5.4	21.4	-6.2	0.2	0.7	-0.2
Fertilizer	4.4	1.7	-9.9	7.7	0.1	-0.6	0.4
Pharmaceutical	3.6	9.1	1.3	-7.7	0.8	0.1	-0.6
Paper	2.3	9.6	9.4	-2.5	0.3	0.3	-0.1
Electronics	2	21.6	97.1	12.5	0.4	1.8	0.4
Chemicals	1.7	-2.3	-0.3	-3.6	-0.1	0.0	-0.1
Caustic Soda	0.4	-0.6	20.7	-8.7	0.0	0.1	0.0
Leather Products	0.9	-16.5	-10.6	2.3	-0.3	-0.2	0.0

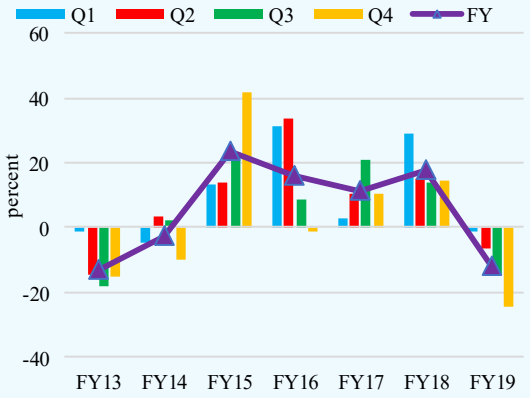
Data source: Pakistan Bureau of Statistics

Automobile sector

After witnessing growth of 17.8 percent during FY18, the automobile industry contracted by 11.8 percent in FY19 (**Figure 2.12**). A combination of macroeconomic and industry-specific factors was responsible for this dip in performance. The exchange rate depreciation led to assemblers passing on the impact of increase in cost to their customers. In addition, higher interest rates lowered demand from the private sector. On the regulatory side, restrictions on purchase of vehicles for non-filers and imposition of regulatory duties on high-end cars further restrained demand.

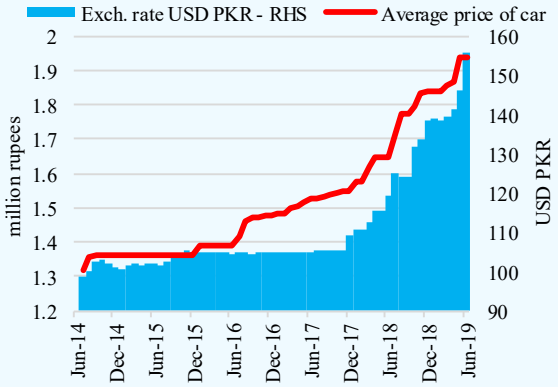
The price of vehicles rose sharply as the exchange rate continued to depreciate throughout the year. The close linkage between car prices and exchange rate depreciation is illustrated in **Figure 2.13**. This is due to low localization levels of the domestic industry.[12] The figure shows the prices increased in tandem with the PKR losing its value against the US dollar. Furthermore, the exchange rate depreciation resulted in an increase in domestic fuel prices. While the price of oil remained relatively stable in international markets, the domestic price of fuel – diesel and petrol – rose by 24.1 percent in FY19, increasing the operating costs of vehicles amid declining real incomes.

Figure 2.12: Automobile Sector Growth



Data source: Pakistan Bureau of Statistics

Figure 2.13: Impact of ER depreciation on Car Prices



Data source: Pakistan Bureau of Statistics, SBP

In addition to the impact of the exchange rate depreciation, higher interest rates also changed the market environment for the automobile industry, as it escalated the financial costs for consumers. This is evident from banking data, which shows that consumer car financing declined to Rs 22.2 billion in FY19, compared to record lending of Rs 43.3 billion just a year earlier.

Regulatory measures taken by the government also influenced the sector's performance. In continuation of the policy to document the economy, the government placed restrictions on purchase of vehicles for non-tax-filers at the start of the year. This effectively barred the large informal segment from purchasing cars. As growth of the sector turned negative, the government in Q3-FY19 allowed non-filers to purchase vehicles below 1,300cc in order to improve demand for vehicles.

Another regulatory measure during Q3-FY19 was the introduction of 10 percent federal excise duty on cars with engine displacement greater than 1,700cc. It increased the price of luxury variants by the same percentage, as assemblers passed on the tax to the consumers. As a result, the demand for these vehicles dipped and affected segment's growth.

[12] The localization level is around 45-60 percent, according to market sources.

At the same time, to alleviate the pressure on BoP, the government started to implement the gift and baggage schemes of vehicle import policy in its true spirit. Further, the government amended the policy, which now required duties and taxes to be remitted in foreign exchange by the person importing the vehicles. This had a positive impact on the domestic automobile sector, as it helped divert the customers from imported vehicles toward locally produced variants. Consequently, by the close of the year, the import bill of cars had decreased from US$ 455.2 million in FY18 to US$ 222.0 million in FY19.

The significant decline in production of 800cc cars can be explained by discontinuation of a popular variant by a manufacturer in Q3-FY19 (**Table 2.7**). Meanwhile, the SUV segment posted a decline due to substantial price increase. Commercial vehicles also witnessed contraction of 3.1 percent in FY19, primarily due to a sharp increase in prices and uncertain economic outlook.[13] The slowdown in construction and trade activities also hampered the growth in production of trucks in FY19.

Table 2.7: Automobile Sector Production

					Growth	
	FY16	FY17	FY18	FY19	FY18	FY19
All Cars	149,856	167,405	195,895	191,526	17.0%	-2.2%
Cars <800 cc	36,869	38,311	47,199	32,121	23.2%	-31.9%
Cars between 800-1000 cc	26,276	35,313	49,848	56,760	41.2%	13.9%
Cars >1000cc	86,711	93,781	98,848	102,645	5.4%	3.8%
Sports Utility Vehicles	773	3,530	13,364	7,525	278.6%	-43.7%
Light Commercial Vehicles	65,924	43,796	50,934	42,182	16.3%	-17.2%
Trucks	5,666	7,712	9,187	6,035	19.1%	-34.3%
Buses	1,070	1,118	784	913	-29.9%	16.5%
Tractors	34,914	53,975	71,894	49,902	33.2%	-30.6%
Motorbikes	1,362,096	1,632,965	1,928,757	1,766,423	18.1%	-8.4%

Data source: PAMA

The lower production of major crops in FY19 hurt tractor and motorcycle demand in the country. These segments rely on the performance of the agriculture sector; as incomes in rural areas remained stagnant, the sector was not able to provide the necessary impetus for the automobile sector in general and tractors and motorcycles in particular.

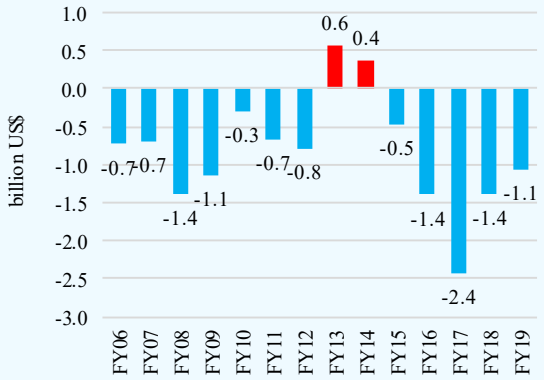
At present, when new assemblers are starting their production activities, especially in the car segment, some aspects need attention. Past experience of car manufacturers that had entered and later exited the market reveals that in addition to setting up assembling units, the entrants have to develop a dealership and service network throughout the country and ensure availability of parts in order to gain foothold in the domestic market. In addition, a critical factor that could facilitate the newcomers would be an enhanced scope and effectiveness of the auto finance market; estimates indicate that only one in ten cars is purchased through financing at present, whereas the ratio is close to eight-in-ten in many countries.

[13] Also, a few manufacturers in this segment have not been accounted for, neither in the LSM nor PAMA data, and that may have also altered the results of the sector.

Food

Growth of the food industry turned negative in FY19, with production contracting by 7.2 percent. The subdued performance does not bode well for an agricultural country like Pakistan. From the standpoint of international trade, Pakistan remains a net importer of food products (**Figure 2.14**). Net imports had averaged US$ 1.6 billion in the last four years. Major imports include palm oil, pulses, milk products and tea, accounted for 55.6 percent of the US$ 5.7 billion bill.

Figure 2.14: Net Food Imports



Data source: Pakistan Bureau of Statistics

Whereas there was improvement in net exports in FY19, it had more to do with depressed international prices of palm oil and pulses rather than quantities imported. Output of the local food industry declined in FY19. Furthermore, only a marginal increase in fixed investment in the sector was recorded. Taken together, it does not paint a bright outlook for the industry. Except for rice, the industry has predominantly catered to local needs only. This inward-looking approach is one explanation for low growth of this sector.

FY19 proved to be another year of below par results for the food processing sector. As was the case last year, the major drag came from sugar industry due to its weight in the food group. Other industries within the food group could not compensate for the substantial decline in sugar output. As a result, overall output of the food industry declined in FY19.

Given that agriculture is still the mainstay of the economy, the country needs to substitute imports of several commodities with localized production. This would significantly ease the pressure on BoP originating from the import of food items. For instance, palm oil imports, which constitute one-third of the food import bill, can be reduced by focusing on developing a domestic oil seed industry.

Sugar

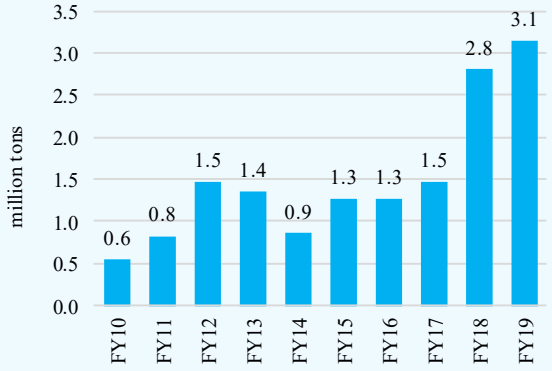
Several factors hurt the sugar sub-component in FY19. First, there was lower availability of sugarcane in FY19, after a record crop in FY18. Last year saw growers selling their product at almost 50 percent discount to indicative prices. In response the growers curtailed the area under sugarcane in FY19 by 17.9 percent.

Second, the liquidity situation of the sugar mills (and, by extension, the growers) got worse in the presence of record stockpile of sugar at the start of the crushing season. The country had accumulated stocks of 3.1 million tons, the highest ever, at the start of FY19 (**Figure 2.15**). It culminated in delayed payments to the growers as stocks went unsold. Meanwhile, the high interest rate environment further constrained the mills' operations.

Third, on the export front, the country exported 0.7 million ton of sugar in FY19 against the allowed quota of 1.1 million. While all exports of 1.5 million tons were made possible through subsidy scheme last year, the country managed to offload some of the stocks without subsidy at the start of the crushing season in FY19. However, the exports gained momentum once the Punjab government announced an export subsidy of Rs 5,350 per ton in Q3-FY19

Another favorable development for the sugar industry towards the end of the year was that the depreciation of the local currency made exports viable without support of subsidies. **Table 2.8** illustrates this point. The sugar industry's crushing capacity is dependent on the availability of sugarcane, and given the country's surplus production, it can earn significant foreign exchange by exporting the commodity. Going forward, this may have a knock-on effect on the industry. As the liquidity position of the sugar mills improves, the financial situation of the growers may also get better.

Figure 2.15: Sugar Carryover Stocks at Start of Period



Data source: USDA

Another source of concern has been the indicative pricing mechanism for sugarcane. Provincial governments, which announce the price of sugarcane at the start of each crushing season, have not changed them in the last 5 years. Setting a high price for sugarcane has resulted in surplus production of both the crop and sugar. The same pricing issue hampered growth in FY19 as well. Respective governments again fixed the indicative price at the same level. Production remained above the consumption level in FY19, albeit by a smaller margin compared to the last few years. Meanwhile, on the trade front, the price differential between the domestic and international markets meant that exports were not possible without subsidy for majority of the year.

Table 2.8: Average Sugar Prices

US$ per ton

	Pakistan	International	Differential
FY15	491	398	-93
FY16	475	412	-63
FY17	469	517	48
FY18	448	365	-83
FY19	366	337	-29
June FY19	**313**	**337**	**25**

Data source: USDA, Ministry of Finance

Given the surplus sugar production in the past few years, one avenue for the industry can be the development of an ethanol market for domestic consumption. Ethanol blended with fossil oil fuels enhances their octane rating. This can be done in coordination with oil marketing firms and refineries. In addition, developing an ethanol fuel industry would create employment, decrease emissions and reduce dependence on imported fuels. Such a transition would also provide an opportunity for the industry to shift from sugar to ethanol production whenever oil prices rise relative to sugar prices.

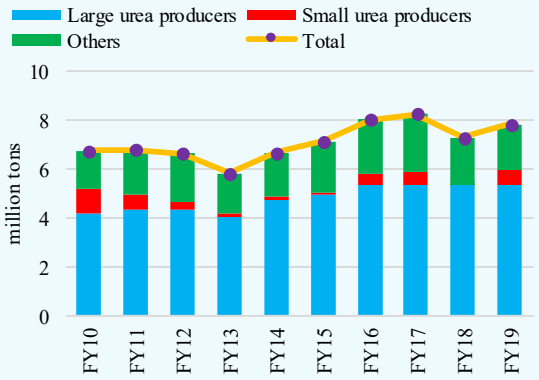
The government had earlier attempted to introduce ethanol blended fuels, but it was not able to gain traction in the market. While a lot of countries around the globe use such fuels, a lack of awareness and negative bias towards such fuels in the local economy meant that their acceptance remained poor. This happened despite the fact that fuel ethanol has a higher RON (Research Octane Number) rating than regular gasoline. Moreover, limited availability of ethanol after the sugar crushing season, also undermined its uptake in the country.

Fertilizer

The domestic fertilizer production can be broadly classified into three categories: (1) urea produced by large, efficient firms that have guaranteed and subsidized domestic gas supplies and tend to post little variation in output; (2) small urea manufacturing firms, whose operations predominantly depend

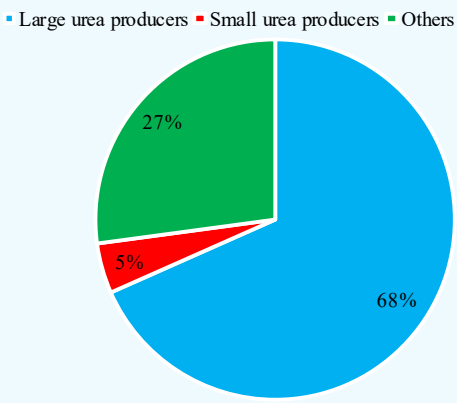
on the government's decision for allocation and price of natural gas; and (3) other fertilizer producers (**Figure 2.16**).

Figure 2.16a : Fertilizer Production



Data source: NFDC

Figure 2.16b: Average Share in Production Shares FY15-19



Pakistan is self-sufficient in urea production, as the industry at full capacity can meet domestic requirements. When smaller units halt production due to diversion of gas to other industries, the government allows import of the commodity. Although addition of RLNG in the energy mix has increased the total availability of gas, it is considerably more expensive than local gas. Given that natural gas accounts for around 70 percent of the cost of urea, small firms are priced out of the market.

To resolve the gas supply issue faced by smaller firms, the government decided to share half of the cost of RLNG in FY19, which helped to revive activities at small urea producing units. At the same time, the output from large urea and other fertilizer manufacturers was recorded at the same level as last year. Thus, small urea firms proved to be the main driver of growth in FY19. Overall output of the industry expanded by the same magnitude as the increase in production of small units, registering growth of 7.7 percent during the year.

Construction Allied Industries

As the economy went into a downtrend, construction allied industries (steel and cement) could not maintain their growth trajectory and contracted significantly in FY19. Aided by public spending, CPEC and private sector investment, the sector had grown impressively on the back of capacity expansions in recent years.

PSDP spending went down from Rs 1,456 billion in FY18 to Rs 1,008.2 billion in FY19. With a major component of this expenditure typically going into construction activities, the considerable slowdown in spending hurt cement and steel industries. Meanwhile, the sector's growth was also weighed down by completion of early harvest CPEC projects.

Developments related to the private sector also played a part. Uncertainty in the real estate market regarding restrictions on non-filers had a negative impact on the industry.[14] In addition, sharp increase in prices of building materials, especially imported goods following the PKR depreciation, also contributed to the slowdown. In the midst of rising costs and uncertain economic outlook, buyers

[14] The government imposed a ban on non-filers from transferring and purchasing properties in excess of Rs 5.0 million.

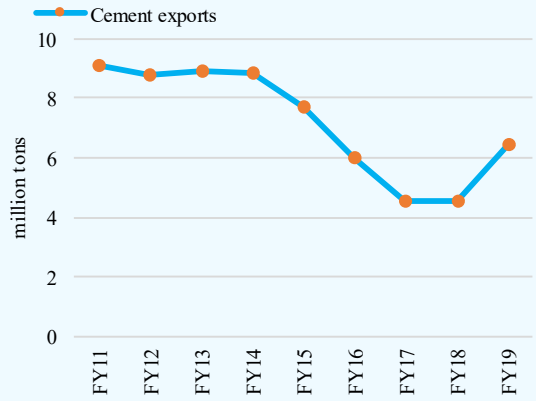
and investors remained cautious, resulting in much lower turnover of real estate transactions during FY19.

Cement

Cement production declined by 3.0 percent in FY19 compared to a double digit growth of 11.1 percent in FY18. The dip in performance can mainly be attributed to the factors outlined above. Prior to FY19, the sector had grown by 7.4 percent per annum during the past 12 years on the back of healthy economic growth.[15]

The tone for FY19 was set early on, as the fiscal year got underway with low PSDP spending under the interim government and a ban on purchase of properties of more than Rs 5 million for the non-tax-filers. The low demand from the both the private and public sectors throughout the rest of the year remained an issue for the sector. However, some of the losses in the domestic market were offset by an increase in exports.

Figure 2.17: Quantum of Cement Exports



Data source: Pakistan Bureau of Statistics

After years of decline, the quantum of cement exports witnessed growth of 40.5 percent in FY19 (**Figure 2.17**). This was largely driven by clinker, which explains the low unit value of the products; in US$ terms, exports saw a jump of 21.9 percent. The diversification of exports market was also a favorable development. The traditional markets of neighboring countries experienced a continuing slowdown; however, domestic firms were able to capture market shares in South Africa, Madagascar, Mozambique and Sri Lanka.

In the middle of this slowdown, the installed capacity of the sector registered an increase of 15.5 percent from last year's level. Major players such as Bestway Cement, Lucky Cement and D.G. Khan Cement added 7.7 million tons to the domestic capacity in FY19. While this is encouraging, utilization levels, which had remained in excess of 90 percent in FY18 fell well below 80 percent in FY19. In order to boost sales in the current situation, the industry needs to focus more on the export market, as domestic demand faces a downward shift. Furthermore, recent depreciation of PKR and alignment of exchange rate with market fundamentals provides the industry a competitive edge to gain more share in the global cement market.

Steel

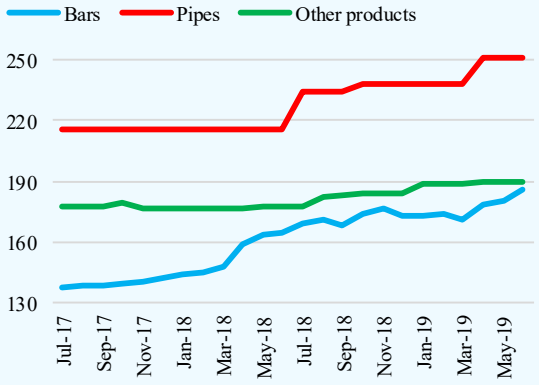
The steel industry's performance was hampered by low domestic demand, resulting in negative growth of 11.2 percent in FY19. Decline in demand from sectors like housing, automobiles, and transportation explains this outcome.

In addition to low demand, the exchange rate depreciation played a significant role in the sector's outcome. Imported raw materials, such as scrap and coal, became expensive. Moreover, increase in electricity prices further escalated the cost for steel producers. In this backdrop, increase in prices was recorded (**Figure 2.18**). On the trade front, a sizable share of demand was met via imports,

[15] The average includes the slowdown in FY11, when the industry had contracted by 8.2 percent.

despite falling by 8.3 percent in FY19. The domestic industry could not meet the country's overall requirements despite lower demand.

Figure 2.18: Price Indices of Steel Products



Data source: Pakistan Bureau of Statistics

Pharmaceutical

The pharmaceutical sector registered a decline of 7.7 percent in FY19. It was only the second time the industry had contracted since the LSM index was rebased in FY06. This downslide has implications for the state of health conditions and the trend is contrary to the rising population; the country is adding more than 5 million people every year at the reported annual growth rate of 2.4 percent.

The broad-based deterioration in the performance of the pharmaceutical industry can be attributed to several factors. First is the sub-optimal drug pricing policy. The regulatory delay in adjustment of prices, with persistent discord between pharmaceutical firms and DRAP over the price-setting mechanism, has hampered the industry's growth prospects for quite a while (as already highlighted in an earlier SBP report).[16]

The industry has also been impeded by low levels of investment, especially with respect to generic drug development. The country is still reliant on imports of raw material from neighboring countries. These imports cost more than US$ 1 billion annually, the majority of which is for generic drugs. Another development that could help explain the performance is linked to the reporting firms in the LSM survey for the pharmaceutical industry. Some firms that are not reporting have shifted their production activities from the south of the country to the north due more conducive business setting opportunities and better regulatory environment.

Electronics

Growth in the electronics sector was driven by the production of electric motors in FY19, a continuing pattern from last year. Production of motors grew by 23.3 percent this year, on top of the hefty 354.0 percent growth recorded in FY18. Since motors are widely used in a range of industrial applications and finished goods, such as washing machines, refrigerators, deep freezers and air conditioners, this propelled the growth of this sub-sector. Improvement in electricity supplies also contributed to the healthy performance.

Meanwhile, since the domestic consumption was on the downward trend, the increase in demand for electric motors from the makers of large appliances cannot completely explain the substantial increase in growth. An increase in the number of reporting LSM firms, which rose from the earlier 17 units to 28 units, may account for this significant growth.

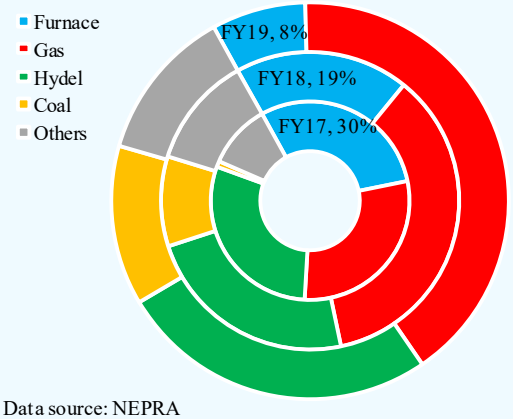
POL

The POL production suffered a decline of 8.4 percent in FY19, in contrast to double digit growth previously. Sales of petrol, diesel and furnace oil, which had been driving growth in recent years, either slowed down or contracted in FY19.

[16] See SBP's The State of Pakistan's Economy Report for Q2-FY19.

While petrol production still managed to post positive growth, it decelerated sharply. This is explained by the strong demand from the private sector for non-commercial purposes, mainly driven by an increase in the numbers of private vehicles on roads. However, the deceleration can be explained by increase in prices of fuel products and lack of commercial activities. Meanwhile, in the diesel market, slow uptake from the industrial and transport segments hurt production activities. A shift in the government's policy on furnace oil in FY18 led to reduced production in this segment in FY19. The preference for RLNG in the place of furnace oil for electricity production became evident over the year (**Figure 2.19**).

Figure 2.19: Electricity Generated from Different Sources



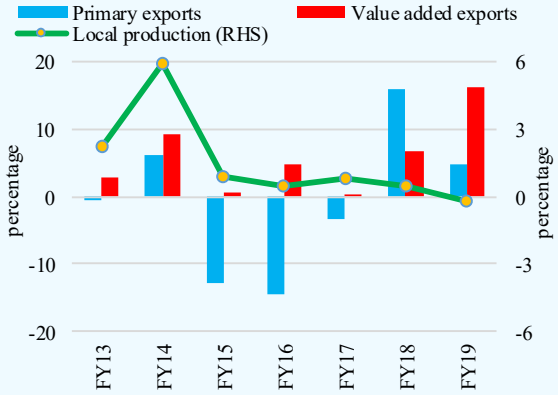
Data source: NEPRA

The refineries are adjusting to the policy measure by investing in hydrocracking units. PRL has planned to invest US$ 1 billion in a Diesel Hydrodesulphurisation Unit to produce Euro-II specification fuel. Further, a proposed deep conversion refinery in Gwadar with technical and financial aid from Saudi Arabia would increase the production capacity of cleaner fuels in the country. Although these projects would take time, the long term growth prospects of the industry look bright.

Textile

The textile sector had a challenging year; the industry contracted by 0.2 percent, compared to marginal growth of 0.5 percent in FY18. The stagnancy of the sector continued, with average growth of less than 0.5 percent for the past 5 years. This corresponds with lower growth in exports of primary textile products such as cotton yarn. On the other hand, LSM data does not completely capture the performance of companies producing high value added products, whose exports have risen in FY19. **Figure 2.20** illustrates the point; growth in quantum of primary textile export was relatively subdued compared to high value added items in FY19.

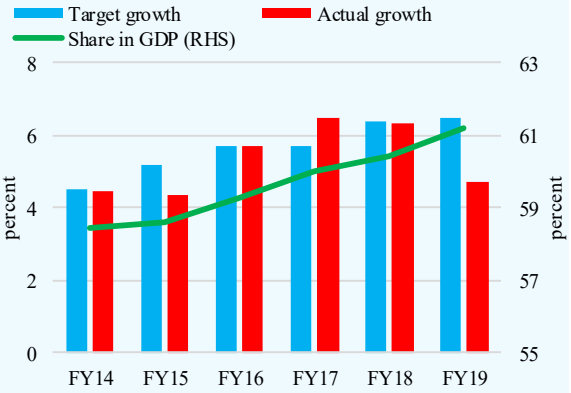
Figure 2.20: Textile Sector Growth



Data source: Pakistan Bureau of Statistics

Further analysis of the sector reveals that jute and woolen products are in a state of constant decline. The production of these commodities had fallen over the years, and this has also contributed to the overall performance of the textile sector. That said, the share of both these products is less than 4 percent in the textile group compared to the lion's share (96.3 percent) of the cotton-based industry.

Figure 2.21: Services Sector Performance



Data source: Pakistan Bureau of Statistics

2.4 Services

The services sector grew by 4.7 percent during FY19, missing the annual target by 1.8 percentage points. This was the most noticeable deviation between the actual and targeted growth rate of services in the past few years (**Figure 2.21**).

Table 2.9: Segment-wise Performance of the Services Sector*

percent

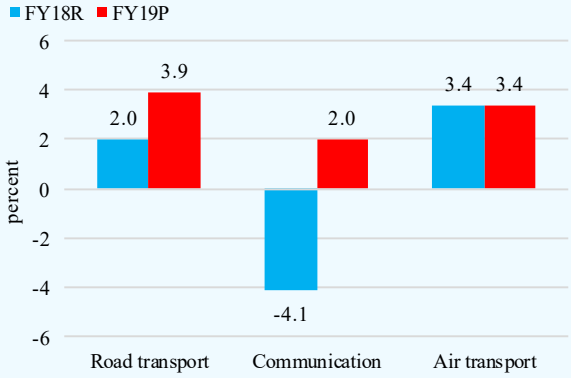
	Share in GDP - FY19	Growth		Contribution to services	
		FY18	FY19	FY18	FY19
Wholesale and retail trade	18.9	6.6	3.1	2.0	1.0
Transport, storage and comm.	12.9	2.1	3.3	0.5	0.7
Other private services	11.0	8.1	7.1	1.4	1.2
General government services	8.4	11.8	8.0	1.5	1.1
Housing services	6.6	4.0	4.0	0.4	0.4
Finance and insurance	3.5	7.0	5.1	0.4	0.3
Services	**61.2**	**6.3**	**4.7**	**6.3**	**4.7**

* Provisional numbers for FY19; revised numbers for FY18

Data source: Pakistan Bureau of Statistics

Growth in the *wholesale and retail trade* segment more than halved compared to last year, attributed in part to the lackluster performance of the commodity-producing sectors (**Table 2.9)**. However, despite a net contraction in LSM and crops, there was still an overall increase in *wholesale and retail trade*. A certain component of domestic sales and services did well, with anecdotal evidence indicating a growing popularity of e-commerce activity and mega shopping malls. This impression was further supported by an increase in sales tax collection excluding POL products during FY19. Furthermore, this trend was also partly explained by the higher than inflation price impact of imports amid PKR depreciation.

Figure 2.22: Transport, Storage and Communication - Growth in GVA of Top-3 Heavyweight Segments



Data source: Pakistan Bureau of Statistics

The *transport, storage and communication* segment grew by 3.3 percent during FY19, an improvement over last year's performance. Three subsectors, namely road transport, communication, and air transport, continued to account for nearly 93 percent of the gross value addition in *transport, storage and communication*.[17] Among these, growth in road transport services nearly doubled compared to last year (**Figure 2.22**). The NHA's activities, boosted by CPEC, contributed to an extension of the road network. This included 17 different short-term projects for the completion of 3,005 km length of roads on the eastern alignment and 6 different short- to medium- term projects for the construction of 1,799 km of roads on the western alignment.[18] The NHA also continued to expand the motorway network, with work on a number of segments completed during FY19 and some activities spilling over to the next year (**Table 2.10**).

Growth in the communication subsector also recovered to some extent during the year, compared to the decline witnessed in FY18. Within telecom, cellular teledensity and broadband penetration rose to 76.8 percent and 33.8 percent, respectively, as of end-June 2019, compared to 72.8 and 28.3 percent

[17] Road transport, communication, and air transport had 71.3 percent, 15.4 percent, and 6.3 percent shares in the GVA of the *transport, storage and communication* segment during FY19. The remainder consisted of water transport (3.7 percent), storage (2.6 percent), railways (0.6 percent), and pipeline transport (0.1 percent).

[18] Data source: Pakistan Economic Survey 2018-19.

last year.[19] Meanwhile, the growth in gross value addition (GVA) by air transport services remained at a similar level as compared to last year.

Apart from the three dominant subsectors in *transport, storage and communication,* the gross value addition by railways services grew by 38.9 percent during FY19. Various performance indicators of Pakistan Railways underscored its growth potential (**Table 2.11**). Growth in the passenger segment stood out in particular, as a number of new trains were launched during the year.

Finance and insurance services faced a slowdown during the year compared to FY18, mirroring the GVA pattern of scheduled banks, which have the largest share in this segment (**Table 2.12**). Deposit generation remained subdued for the greater part of FY19 compared to last year, barring a spurt in the last week of the fiscal year.[20] Growth in bank credit to the private sector was also lower than last year (for details, see **Chapter 3**).[21] The performance of mutual funds was also muted on the whole; the portfolio of such entities typically consists of investments in the equity market, which performed poorly during FY19.[22] By comparison, insurance, reinsurance and pension funds performed much better, given that their growth during FY19 was built on a high base from last year. Regarding the central bank, its gross value addition declined during the year in the backdrop of exchange rate depreciation.

Table 2.10: Motorway Network

Motorway	Length (Km)	Status
Islamabad - Lahore, M-2	357	Completed
Lahore - Abdul Hakeem, M-3	230	Completed*
Peshawar- Islamabad, M-1	156	Completed
Shorkot - Khanewal, M-4	64	Completed
Gojra- Shorkot, M-4	62	Completed
Faislabad - Gojra, M-4	58	Completed
Pindi Bhattian - Faisalabad, M-4	57	Completed
Khanewal - Multan, M-4	56	Completed
Karachi-Hyderabad (M-9)	136	Completion: June 2019
Sukkur - Multan (M-5)	392	Completion: Sep, 2019
Sialkot - Lahore	91	Completion: Dec, 2019
Hakla-D.I Khan	285	Completion: Jun, 2020
Havelian - Mansehra	39	Under construction
Hazara Motorway (E-35)	59	Under construction
Hyderabad - Sukkur, (M-6)	296	Procurement in process

* Status updated from newspaper report
Data source: Pakistan Economic Survey, 2018-19

Table 2.11: Performance of Pakistan Railways

	Jul-Feb FY18	Jul-Feb FY19	Growth
Number of passengers carried (millions)	35.9	39.9	11.1
Passenger traffic (kms)	16,753.2	18,745.8	11.9
Freight carried (million tons)	5.2	5.3	1.9
Freight carried (kms)	4,887.4	5,269.6	7.8
Gross earnings (million Rs)	30,891.2	34,066.1	10.3

Data source: Pakistan Economic Survey, 2018-19

General government services continued to be the fastest-growing segment within the services sector, despite the government's shift in favor of austerity. While it experienced a slowdown compared to FY18, the segment's growth remained relatively robust that can be traced to the real increase in remunerations and pensions of serving and retired government employees respectively.

There are certain downside risks to the outlook of the services sector in FY20. A case in point is the smooth implementation of the Axle Load Control regime on motorways and national highways, an issue which came to the fore towards the close of FY19. The regime shift's basic premise was to curb overloading of vehicles, in order to protect the road infrastructure and also prevent accidents caused

[19] Data source: PTA. Broadband penetration is the ratio between the number of subscribers and total population, multiplied by 100 to represent broadband penetration per 100 inhabitants. Similarly, cellular teledensity represents the number of cellular connections per 100 inhabitants.
[20] Deposit generation grew 4.7 percent between 1-Jul-2018 to 21-Jun-2019, compared to 5.1 percent during 1-Jul-2017 to 22-Jun-2018. By end-Jun 2019 though, it had risen to 10.6 percent for FY19, compared to 8.8 percent for FY18. These developments occurred in the backdrop of a 30-June-2019 deadline for the Assets Declaration Scheme and other documentation measures.
[21] Bank credit to the private sector grew by 11.6 percent during FY19, compared to 14.9 percent a year earlier.
[22] The GVA by mutual funds is captured in the 'Activities auxiliary to financial services' subcategory.

by overloading. However, the move was met with stiff resistance from certain quarters of the business community and transporters, who argued that it would hamper the timely transportation of goods and unnecessarily increase the cost of doing business, among other things. The decision was initially deferred in June 2019, but then put into motion the next month. Its impact remains to be seen, particularly for *transport, storage and communication* and *wholesale and retail trade*, the two segments which typically drive activity in the services sector. There can be ramifications for inflation as well.

Table 2.12: Finance and Insurance
percent

	Share in FY19	Growth	
		FY18	FY19
Other monetary intermediation	87.0	8.8	6.2
Scheduled banks	82.1	7.5	5.3
Non-scheduled banks	4.9	46.1	24.6
Activities auxiliary to financial services	5.2	-21.7	-7.3
Insurance, reinsurance & pension funds	5.0	26.3	12.8
Central banking	1.7	15.7	-12.5
Other financial services	1.1	-3.7	-8.2
Finance and insurance	**100.0**	**7.0**	**5.1**

Data source: Pakistan Bureau of Statistics