

## **PAPER ON EXPORT ENHANCEMENT FROM PAKISTAN “THE AUTO PARTS SECTOR”**

**Is Pakistan’s industry ready for meeting the worlds requirement?  
Is Pakistan’s Auto Parts Industry capable of achieving export competitiveness?  
What is stopping Pakistan from becoming a destination known for Engineering?**

### **PREFACE:**

In 2021 the world is a different place for trade and business, traditional methods for running the supply chain have failed in the covid era. Companies are scrambling to manage and sustain resources. As we move into the next phase, now is the time for businesses to seek out and seize the opportunities emerging in the recovery. This involves conducting an “after-action review” to collect data and insights on lessons learned from the pandemic, and then using these to priorities actions to enhance business value today and build strategic resilience for tomorrow. Businesses that take these steps now will be well-placed to capitalize more effectively on the opportunities rising in the post-COVID-19 recovery

As the world is resetting, this is the right time to act upon different strategies and capitalize on building our countries image in the world as an export destination. But before that are our industries ready for the world? Government support organizations, associations, chambers and companies themselves will have to play a vital role in educating and building capacity, doing the research and formulating a road map.

This report will answer your questions related to the Auto parts industry. This is an industry which if mentored and taken care off can become another industry in Pakistan that can become the backbone of the economy.

### **INTRODUCTION TO THE INDUSTRY:**

Deletion Program in Pakistan, which started in 1985 and lasted till 2005, was aimed at achieving gradual localization of automotive parts to meet the domestic demand of the OEMs and promote import substitution. Despite all the indigenization achieved through the protection provided, the industry could achieve localization mostly in some general non-functional parts, whereas deletion of critical functional components could not be attained for reasons of low volumes and technology transfer issues. Use of outdated technology, absence of R & D, lack of designing capability, very low innovation spirit, dependence on domestic market and captive nature of the industry largely restrained further development and growth of the industry.

Pakistan has about 1500-2000 parts manufacturers based throughout Pakistan with major clusters in the Punjab and Sindh provinces. Out of these only 300 are tier 1 manufacturers, which means that they are on the direct supply chain of an Original Equipment Manufacturer.

The auto parts making industry of Pakistan deem to play an important role in the growth of auto industry as they bear the responsibility of producing auto parts and sub-assemblies according to the bench mark set by the respective Original Equipment Manufacturers (OEMs).

On the other hand, the industry is still in the process of development and lacking competitiveness in terms of quality, cost and flexibility of manufacturing systems. Unfortunately, Pakistan has not been able to derive maximum benefits in terms of technical know-how, production technology and quality control in order to upgrade the vendor base of auto sector.

### **Technology**

The manufacturing capabilities and parts being manufactured by the Pakistan auto parts industry can be categorized as The Auto Parts Manufacturers possess the following technologies:

1. Casting
2. Machining
3. Forging
4. Rubber
5. Plastic
6. Sheet metal
7. Jigs and Fixture manufacturing
8. Assembling lines
9. Heat Treatment facilities
10. Wire Harness
11. Die Making
12. Speakers and Car Systems
13. Springs
14. Welding
15. Interiors made from Fabric, Adhesives and carpets

### **Certifications**

These practices indicate that you meet a certain standard of competence and can give you a competitive advantage. The Auto parts manufacturers are mostly certified with basics. In exports you have to take your quality and standards to the international benchmarks and that means heavy investments. Following are some of the certifications implemented in APM industry of Pakistan:

- **ISO 9001**, majority of the Auto Parts Manufacturers possess this basic
- **ISO/TS 16949**, only a few companies have this but a very important certification especially when it comes to exporting.
- **Health & Safety ISO 45001**, not a lot of members have this certification
- **ISO 9002**: Quality Assurance in design, installation, and production
- **ISO 14001**: 2015 effective environmental management system (EMS)
- **ISO 50001**: Energy Management
- **OHSAS 18001**: International Occupational Health and Safety Management Standard
- **ISO 17025**: testing, sampling or calibration

The above technologies and certifications provide parts and accessories to the following segments of the auto sector:

1. Car Segment, 20% - 50% localization depending upon the model and engine capacity. We manufacture an average 250,000 LCV's. With new OEMs in the field, and a new

policy scheduled to come out in July 2021, this segment holds huge potential, but bearers to export include WP-29 standards compliance.

2. The Two & Three-Wheeler segment, 95% localized, we manufacture around 1.5 million two wheelers a year, limitations to export, model and following WP-29 standards compliance.
3. Tractor Industry segment, 95% localized, we manufacturer 40,000 per year but have a built-in capacity of 100,000 units. Limitations to exports include, licensing between Parent and local company.
4. Truck & Bus industry, 25% localized, volumes are low about 3,000 & 4,000 annually, limitation to export include, parent company objective, WP-29 standard compliance.

### CURRENT EXPORT POTENTIAL FROM SECTOR:

First, we need to understand our target market at the moment. The auto parts manufacturers based in Pakistan are not part of any global supply chain, they are not exporting to any international OEM that has huge volumes. The majority are exporting to distributors or aftermarket suppliers.

The APMs based in Pakistan are exporting about \$40 - \$50 million annually but have a huge potential to increase it second this amount is achieved by only by 30-40 APMs that means there is a huge potential to untap. Auto Parts Manufacturers possess technology which allow them to integrate into other international industries. But the entrepreneur and his organization need to be geared up before entering into exports. The entrepreneur does not nowhere and how to start , while his organization is currently not following simple S.O.P that increase efficacy and quality. In the certifications side, organizations have basic or none. Only the top organizations of the industry have further certification. But following are some of the exports from this sector:

No	Category	Auto parts product	PARTS	Value (2019)		CAGR (2015-2019)	The largest import destination in value
				US\$ million	share		
1	Other parts	Motor vehicle parts nes	RADIATOR CAPS: <b>87089900</b> (KORTECH RADIATORS), FUEL TANKS FOR CARS, TRUCKS AND TRACTORS. <b>87089900</b> , (MGA AUTO INDUSTRIES PVT LTD) EXPANSION TANK, <b>87089900</b> , (THERMOLE IND PVT LTD) AIR CONDITION DUCT ASSY: <b>87089900</b> , (THERMOLEINDPVT)  HOSE SIDE DEMISTER: <b>87089900</b> , (THERMOLE IND PVT LTD) WHEEL HUBS : <b>87089900</b> (RASTGAR ENGINEERING PVT LTD). STAY FAN HOUSING: <b>87089980</b> , (RASTGAR ENGINEERING PVT LTD) STEERING GEAR: <b>870899</b> (RASTGAR ENGINEERING PVT LTD)	7	28%	-6	The U.S.
2	Drivetrain parts	Transmissions for motor vehicles		7	26%	25	Italy
3	Engines and engine parts	Parts of : air or vacuum pumps, air or other gas compressors, fans and ventilating or recycling hoods incorporating a fan, n.e.s		2	9%	-32	Italy

4	Engines and engine parts	Radiators for motor vehicles	COPPER RADIATORS AND CORES: <b>8708.9100</b> (KORTECH RADIATORS) ALUMINIUM RADIATORS AND CORES: <b>87089100</b> (KORTECH RADIATORS) COOLER, SHEET METAL AND OTHERS: <b>87089100</b> (KORTECH RADIATORS) TANK ASSY WATER RESERVE: <b>87089100</b> (THERMOSE IND PVT LTD)	1	4%	8	Bangladesh
5	Bodies and Parts	Parts and accessories of bodies nes for motor vehicle	NOZZLE DEFROSTER: <b>87082900</b> (THERMOSE IND PVT LTD). WINDSHIELD WASHER NOZZLE: <b>87082900, 40169919</b> (THERMOSE IND PVT LTD). INTERIOR TRIM SET: <b>87082990</b> (THERMOSE IND PVT LTD) FUEL TANK COVER: <b>870829</b> (THERMOSE IND PVT LTD) CAB MOUNTING: <b>87082995</b> (RASTGAR ENGINEERING PVT LTD ENGINE MOUNTING BRACKET: <b>87082995</b> (RASTGAR ENGINEERING PVT LTD). PVC FLOOR MAT: <b>8708.2990</b> (MEHRAN COMMERCIAL ENTERPRISES DOOR TRIM VACUUM: <b>8709.2919</b> (MEHRAN COMMERCIAL ENTERPRISES) SUN VISOR: DIFFERENT PROCESS <b>8708.2911</b> . (MEHRAN COMMERCIAL ENTERPRISES). SEAT ASSEMBLY <b>8708.2916</b> (PRECISION PRODUCTS ENTERPRISES)	1	3%	-16	The U.S.
6	Automotive Tires/ Wheels	New pneumatic tyres, of rubber, of a kind used for motor cars, incl. station wagons and racing cars		1	3%	40	Afganistan
7	Drivetrain parts	Transmission shafts, incl. cam shafts and crank shafts, and cranks		1	3%	60	Angola
8	Engines and engine parts	Oil or petrol-filters for internal combustion engines		1	3%	1	UAE
9	Drivetrain parts	Gears and gearing for machinery (excluding toothed wheels, chain sprockets and other transmission elements presented separately); ball or roller screws; gear boxes and other speed changers, incl. torque converters		1	2%	10	Romania
10	Other parts	Filtering or purifying machinery for gases nes		0.5	1.8%	-5	UAE
11	Other parts	Plates, separators and other parts of electric accumulators, n.e.s.		0.4	1.7%	-	China
12	Drivetrain parts	Bearing housings for machinery, not incorporating ball or roller bearings; plain shaft bearings	WHEEL HUB BEARINGS: <b>87483300</b> (RASTGAR ENGINEERING PVT LTD)	0.4	1.6%	48	Qatar
13	Other parts		EXHAUST SYSTEMS: FOR TRUCK. <b>87089200</b> , (MGA AUTO INDUSTRIES PVT LTD). FUEL TANK CAPS, <b>83099090</b> (MGA AUTO INDUSTRIES PVT LTD) LEVER PARKING SYSTEM: FOR TRUCKS AND TRACTORS. <b>87141090</b> , (MGA AUTO INDUSTRIES PVT LTD). GEAR SHIFT KNOB: <b>84839000</b> (THERMOSE IND PVT LTD), HOSE WATER INLET: <b>40091190</b> (DARSON IND PVT LTD). HOSE WATER LOWER <b>40091190</b> (DARSON IND PVT LTD) HOSE WATER UPPER <b>40091190</b> (DARSON IND PVT LTD). BREAK DRUMS: <b>87083090</b> (RASTGAR ENGINEERING PVT LTD) UPPER HOSE: <b>40091190</b> (DARSON IND PVT LTD) LOWER HOSE : <b>40091190</b> (DARSON IND PVT LTD) AIR CLEANER SF: <b>40094110</b> (DARSON IND PVT LTD) RUBBER MOLDED PARTS: <b>40094110</b> (DARSON IND PVT LTD). FLOOR MAT: <b>4016.9930</b> . (MEHRAN COMMERCIAL ENTERPRISES) REAR VIEW MIRROR. <b>7009.1010</b> (MEHRAN COMMERCIAL ENTERPRISES). AGRI TRACTOR RIMS: <b>87087031</b> (PRECISION PRODUCTS ENTERPRISES) TAIL LIGHT <b>8512.9020</b> (PRECISION PRODUCTS ENTERPRISES) FAN SHROUD <b>8414. 5949</b> (PRECISION PRODUCTS ENTERPRISES)				

Source: [trademap.org](http://trademap.org). &questionnaire from APMs sample

## Tractor Parts:

As compared to Asian and European countries, Pakistan is well poised to explore the aftermarket potential for tractor parts in the African countries where Massey Ferguson tractors are used. In Europe, however, Pakistan can find a good market for processes & capabilities largely in the forging, casting and machining segment etc. This shall, however, require bracing new technologies, skills enhancement, product and product certification and capacity expansion through contracts with the renowned companies.

In the fast moving/replacement market parts segment, Pakistani companies need to explore the opportunity of selling its products in the European and North American aftermarkets, where New Holland and Massey Ferguson brands are present. The important markets for Pakistani companies will be Africa and to some extent Middle East where they have to compete the Chinese, Japanese, Turkish, and Indian manufacturers.

The potential fast moving aftermarket parts could be **Pistons of Internal Combustion Engines (Below 55 HP), Brake Shoes, Clutch/Pressure Plate, Gaskets, Air and Fuel filters** etc which are already being exported to the African countries. Forging & Castings of engine parts can also be explored in the European countries where there a voluminous sale of tractors is made every year and presence of tractors already in operation in the agrievolution countries.

### **Car Parts:**

Pakistan is a currently making parts for Japanese and Chinese oriented products. We will be moving towards Korean and others soon. But internationally this segment has a lot of verity. E,g there are more than 50 models sold in USA in this segment. So our APM cannot focus on the entire market, he can only try to extract customers for his products (Niche) and that reduces is overall size of the market.

Following are the largest exporters of cars parts in the world. We need to conduct a more in-depth study on the business models of the these companies. Trying to get on the supply chain of these companies will require Government to Government relations.

1. Robert Bosch GmbH (Germany)
2. Magna International Inc (Canada)
3. Continental AG (Germany)
4. Denso Corp (Japan)
5. Aisin Seiki Co (Japan)
6. Hyundai Mobis (South Korea)
7. Faurecia (France)
8. Johnson Controls Inc (United States)
9. ZF Friedrichshafen AG (Germany)
10. Lear Corp (United States)

### **Motorcycle Parts:**

This is another huge potential market for Pakistani players, China is one of the leading countries in the production and export of motorbikes. Along with motorbikes production, China is also a leading producer of motorcycle parts and accessories. Although we have been making more than 1.5 million bikes, we still have not been able to tap into any international market. One of the biggest reasons is the international standards like WP-29.

Third world countries need to be targeted and bearers overcome. There are a lot of NTBs that countries have imposed in the two-wheeler segment. Pakistan has a large capacity to produce Japanese and Chinese/local brand motorcycles. The OEMs should look for new markets along

with enhancement in export to the countries already having presence of Pakistan-made motorcycles and parts for 100 cc, 125 cc and 150 cc motorcycles. The capacity for parts manufacturing, however needs expansion along with technology upgrade to compete in the export market.

## **BEARIERS TO EXPORT**

Due to limited makes and models of automotive vehicles and agricultural tractors, the auto parts are designed and manufactured for the Japanese origin cars, trucks, buses and motorcycles. Parts for the agricultural tractors are also made mainly for Massey Ferguson and New Holland tractors. So these parts are limited to the local market only and nowhere in the world are demanded except for some general parts or wherever the vehicles from Pakistan are exported. Since we have export of Agricultural tractors and motorcycles only, small pockets of aftermarket parts exists with low volume and value, whereas there is no export of cars, buses/trucks (with the exception of buses exported to Afghanistan) due to franchise agreements.

The auto parts manufacturing industry is very diverse, and in the context of new technologies and innovations, the industry has gone more complex because of involving a number of engineering and ancillary processes, whereas Pakistan auto parts manufacturing industry is prone to the limited product mix and having overall technological and engineering processes alike, except for a few manufacturers of auto parts. This also is hindering to the expansion in product mix and export to the world market.

The exports from this APM sector are solely the hard work of the entrepreneur and the only subsidy or assistance he gets is 5 exhibitions. Companies and entrepreneurs have themselves tried to understand the potential and dynamics of doing business in different continents.

### **The Entrepreneurs Mindset**

Today's businessmen want results and fast. Investing in an export desk, participation in international exhibition, upgrading processes, buying new machinery, certifications, website development, upgrading marketing collateral and time are some of the areas where investments have to be made to make a good mark in the export markets but don't confirm an export order. This makes him think twice before an export investment decision.

Constraints Faced by Entrepreneurs:

- a) At the firm level, very few domestic firms have international standard certifications;
- b) Local small companies have limited innovation capability;
- c) Many firms face language barriers in communicating with customers.
- d) Cumbersome regulations and logistics constraints (e.g. poor efficiency in custom clearance and weak infrastructure quality), also affect the ability of local SMEs to move up the valuechain

### **The Business Process in Engineering Goods**

The business process to generate a customer is lengthy. This starts with the customer interacting with a foreign company from Pakistan. The Pakistani company visits an international fair and meets with the customer and the customer provides a sample or drawing. This drawing or sample is reversed engineered. Negotiations start, price, quantity and shipping terms are met and finally the part is exported. This process will take minimum of 6 months.

The most important factor for customers when it comes to engineered items is “TRUST”. The trust factor comes into play, when you have been scene in multiple exhibitions in multiple venues.

## **POLICY INTERVENTIONS**

### **CORE EXPORT COMMITTEE**

The policy formulation is not hard in Pakistan as there are many resources, the main problem lies in implementation, monitoring and evaluation. We need a policy that provides a range of measures to address the lack of competitive local suppliers in the country. It should have improvement in the monitoring and evaluation of the policy and in the co-ordination of this policy with other relevant government programmes for potential domestic suppliers.

- Public Private Think tanks for policy formulation and road map development.  
Capacity
- Collecting Data of the industries to evaluate the core competencies and to devise a road map.
- The Committee should comprise of exporters and final decision makers i.e. secretary Commerce, Industries and Finance. Initially the Meeting should be held once
- Market research, developing the entrepreneur’s mindset and promoting Pakistan’s image.

### **RAW MATERIAL**

Until we can control the inputs we cannot think about exporting. This is the biggest hurdle for any manufacturer. different raw material used i.e., steel alloys, PVC, Rubber etc. majority of the raw material is imported. We need a clear vision of import substitutions. Currently we import about \$7Billion worth of steel and plastic rawmaterials which can be made locally with the proper feasibility and initiation, these things canbe achieved.Just to give an idea please check the following Steel sheet price increase history of one year – I.S.L, AYSHA Steel, HADEED PAKISTAN

#	Date	Price Increase
1	12 May 2020	Rs.3
2	18 July 2020	Rs.3

3	29 July 2020	Rs.3
4	20 Aug 2020	Rs.3
5	01 Sep 2020	Rs. 3
6	10 Nov 2020	Rs.3
7	17 Nov 2020	Rs.4
8	30 Nov 2020	Rs.4
9	07 Nov 2020	Rs.5
10	07 Nov 2020	Rs.5
11	14 Nov 2020	Rs.3
12	22 Dec 2020	Rs.5
13	14 Jan 2021	Rs.3
14	23 Feb 2021	Rs.2
15	02 Mar 2021	Rs.3
16	05 Mar 2021	Rs.3
17	22 Mar 2021	Rs.5
18	05 Apr 2021	Rs.3
19	12 Apr 2021	Rs.3
20	19 April 2021	Rs.5
21	27 April 2021	Rs.5
22	7 May 2021	Rs.5
23	25 May 2021	Rs.3
24	06 June 2021	Rs.3
	TOTAL	Rs.82 plus 17% Sale Tax
	GRAND TOTAL INCLUDING SALE TAX	Rs.95.94

Manufacturers do have access to some steel alloys from Peoples Steel Mill Ltd but the quality and delivery is not consistent. We cannot become competitive till we have control on the basic input.

### **INCREASES MNE-SME LINKAGES**

- Undertake programmes to enhance workforce and managerial skills and strengthen compliance with international technical standards at the firm level;
- Encourage supportive research from universities;
- Ease the search process for MNEs in locating “qualified” and “verified” domestic suppliers.
- improvements in business environment conditions and basic infrastructure, including:
  - a) improving contract enforcement and border procedures;
  - b) upgrading the transport system and developing a mobility strategy within the main economic centres;
  - c) improving logistical support services, such as storage, warehousing and cargo handling;
  - d) building an efficient credit system geared towards supply chain finance and long-term credit;
  - e) developing the national innovation system with a view to improving the innovation capacities of local suppliers;
  - f) setting up institutions offering specialised services to SIs, such as testing labs and certification agencies; and
  - g) involving universities and vocational colleges in building up the technical and soft skills needed in global value chains GVCs.

### **FINANCE, TAXATIONS & SUBSIDIES**



Move forward with a plan to enforce a preferential corporate tax regime for SMEs, in particular the legal provisions introducing lower tax rates for micro and small companies. **Financial** policies should be introduced to help the sector reduce required collateral to obtain loans.

Existing incentives could be extended to second-tier suppliers, with a view to building more locally integrated value chains. This is very important so the subsidy trickles down to the people who need that push.

An overall export subsidy would simply preserve the allocation associated with the current pattern of comparative advantage. If export subsidies are targeted to the sectors that exhibit an intent, then they could also be effective in switching the economy to the equilibrium with higher welfare. Again, production subsidies are less distortionary than export subsidies but they impose stronger fiscal demands. Thus, for governments with great fiscal needs or where taxation is very distortionary at the margin, export subsidies could be a reasonable option, although import tariffs would be less costly.

In any case, the advantages of export subsidies relative to import tariffs in improving productivity are threefold:

- (1) that by promoting exports, a country makes sure that firms are subject to the “discipline of the international market,” which forces firms to become more productive;
- (2) that by subsidizing only exporting firms, a country effectively limits the subsidy to firms with high productivity; and
- (3) that domestic markets may be too small to allow the protected industry to reap the full benefits of Marshallian externalities.

## CONCLUSION

- Building the mindset of the entrepreneur, so he can think about new ideas and ways to export his product.
- Raw Material duty and taxes control. Don't burden the entrepreneur with new duties and taxes.
- Technology is a critical enabler of change and a driver of global competitive advantage. This is particularly true in the crowded and discerning automotive market where technology facilitates process and product innovation. This supports enhanced functionality and product differentiation. There must be technology transfer agreements on national level with different countries
- There was a time when basic machines were made in Pakistan, and thereafter nationalization this project was scrapped, and now we import machinery from China, Taiwan and other foreign countries. A comprehensive plan needs to be devised to start this project.
- Although barriers to the entry of aftermarket parts in the world market are low, for which the industry should focus but investment in the production of hi-tech OEM parts could be more profitable. This can be achieved by adopting new technologies and standards. In the present scenario, the industry has also to articulate itself with the

production of the auto parts required by the domestic OEMs as well as to the export market in the context of Internal Combustion Engine fuels i.e., diesel, hydrogen, natural gas and ethanol etc and for the Hybrid Engines and their respective parts' development. This area however, shall require hi-tech, updated skills and big investment.

- The industry in collaboration with the government departments needs to put their efforts together for the achievement in the field of innovation through R & D and skill development. For this, the industry should collaborate with the engineering universities for R & D and innovation in line with the new technologies, materials etc.
- Pakistan auto industry is captive and is limited to three car assemblers producing cars under franchise agreements which prohibits sale of cars to the regional countries. This has limited the parts manufacturers who too use outdated technologies for the production of parts mainly because the OEMs in Pakistan are generally producing globally retired models of cars. In order to stop this retardation, the auto parts manufacturers have to enter in to Joint Ventures with foreign investors to produce parts to supply in the world market.
- The China-Pakistan Economic Corridor (CPEC), which is an opportunity, may also become a threat to the auto parts industry as with the operation of the route, low-cost parts may start entering in to Pakistan to which the industry face a challenge of competition for the existing after sale auto market. In addition to this, Chinese may make huge investments in the industrial zones and capture the domestic as well as the export pockets of Pakistani made auto parts. It is the time where industry has to reposition itself in the context of CPEC not only to compete in the domestic market but in the export market too. Here industry needs to enter in to new technical collaboration with the foreign companies, particularly with the European Tier-1 manufacturers for technology transfer and where the Pakistani counterparts could position and enable themselves to sell processes, capabilities and skills of cheap labor by manufacturing exportable parts in Pakistan.
- In the motorcycle and farm tractor segments, Pakistan achieved the localization level of around 90% and around 50-60% in cars (below 1200 CC engine capacities), whereas in the HCV category the localization of auto parts was low. Local assembling of buses/trucks and prime movers is made largely from the imported parts. In the vast network of roads being developed under the CPEC, population of Heavy Commercial Vehicles (HCVs) will increase which shall accelerate the demand of after sale parts for these vehicles. The parts for these HCVs either shall enter from China or from other countries in big volumes and values.



Mashood Khan / Expert Auto Sector  
Director Export / Mehran Commercial Enterprises  
Mobile : +92 300 8250615

Mashood Khan / Expert Auto Sector  
Director Export / Mehran Commercial Enterprises  
Mobile : +92 300 8250615

Mashood Khan / Expert Auto Sector  
Director Export / Mehran Commercial Enterprises  
Mobile : +92 300 8250615